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UTTAR PRADESH**

DISTRICT SAHARANPUR



UTTAR PRADESH DISTRICT GAZETTEERS



SAHARANPUR

DANGLI PRASAD VARUN
I. A. S.
State Editor

सत्यमेव जयते

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PREFACE

The present Gazetteer of the district of Saharanpur is twenty-seventh in the series of revised District Gazetteers of the State of Uttar Pradesh which are being published under a scheme jointly sponsored and financed by the Union and the State Government.

Early accounts of the Saharanpur district are to be found in E.T. Atkinson's, *Statistical, Descriptive and Historical Account of the North-Western Provinces of India*, Vol. II, (1875), various Settlement reports of the region and H. R. Nevill's *Saharanpur A Gazetteer* (Allahabad, 1909) and its supplements. A bibliography of the published works used in the preparation of this Gazetteer, appears at its end.

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सत्यमेव जयते

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CHAPTER I

GENERAL

Origin of Name of District

The district is named after its headquarters town Saharanpur which was founded during the reign of Muhammad *bin* Tughluq. It was named by him after Shah Haran Chishti, a celebrated saint, whose shrine is still venerated in the town.

Location, Boundaries, Area and Population

Location and Boundaries—The district which belongs to the Meerut Division lies between Lat. $29^{\circ} 34'$ N. and $30^{\circ} 24'$ N. and Long. $77^{\circ} 7'$ E. and $78^{\circ} 12'$ E. It forms the northern most portion of the Ganga-Yamuna doab, and is bounded on the north by the Siwalik range which, extending in a continuous ridge from the Yamuna in the west to the Ganga in the east, separates this district from district Dehra Dun. The eastern boundary is formed by the Ganga which separates the district from district Bijnor. To the south lies the district of Muzaffarnagar, the boundary on this side being purely artificial. On the west the boundary is formed by the Yamuna river which separates the district from the Ambala and Karnal districts of the Haryana State.

Area—According to the Central Statistical Organisation, the district had an area of 5,526 sq. km. in 1971 and it occupied the 23rd position in regard to area, in the State. For land utilisation purposes the area of the district stood at 5,516.4 sq. km. in 1971. Owing to the action of the Ganga and the Yamuna frequent changes take place in the area of the district.

Population—According to the census of 1971, the district had 20,54,834 people including 9,26,349 females and occupied 27th position in the State in respect of population. The rural population of the district was 15,72,027 (females 7,12,666) and the urban 4,82,807 (females 2,13,683).

History of District as Administrative Unit

The region now covered by the district of Saharanpur was probably one of the first regions of the upper doab occupied by the Aryans. Probably it formed a portion of the Pandava kingdom of Hastinapur. It is not till the foundation of the Saharanpur town in the 14th century that we learn historical details with regard to the district. In 1414, the tract was conferred by Sultan Saiyid Khizr Khan on Saiyid Salim. His descendants ruled the district until the reign of Akbar.

During the reign of Akbar Saharanpur formed a part of the subah of Delhi and gave its name to a sirkar which extended from the Siwaliks into the present Meerut district. The sirkar of Saharanpur was then divided into four *dasturs* or districts comprising 36 *mahals*, of which 15 lay within the existing boundary of district Saharanpur. The boundaries of the *mahals* (parganas), have been altered from time to time, especially in the days of Rohilla supremacy and in the early years of British rule.

The district acquired by the British in 1803 at first formed part of a large area called Saharanpur, which also included the present district of Muzaffarnagar and part of district Meerut. Immediately after the capture of Aligarh the collectors were directed to take charge of the conquered territory and to provide for its administration, the area being divided between Moradabad, Etawah and Fatehgarh. At the end of October, 1803, a commission also met at Koil and proposed the distribution of the area into four divisions, of which the first comprised 53 parganas now included in the districts of Saharanpur, Muzaffarnagar and Meerut. A week later it was directed that this division should be split up into two portions, the northern including the present district of Saharanpur and about half of Muzaffarnagar, was entrusted to the charge of the Resident at Delhi while the remainder was attached to Moradabad. In August 1804, the northern division became a separate district with headquarters at Saharanpur. No further change of importance occurred till 1824, when a subcollectorship of Muzaffarnagar was created with revenue jurisdiction over 14 parganas and two years later this tract was converted into a regular district reducing Saharanpur to 25 parganas only. These parganas were, however, very different in area and extent to those at present. Many of the old names are still retained, but a large number have disappeared, while others are the creation of the British government. The first great reorganisation took place in 1842, but already one pargana, Ambahta, had been absorbed into Nakur, apparently before the constitution of district Muzaffarnagar, though the exact date cannot be ascertained.

Extensive changes were made in 1842, no fewer than nine old parganas were broken up and their component villages distributed among the adjoining tracts. The Akbari pargana Malhipur, which lay to the east of pargana Saharanpur, was absorbed in the neighbouring parganas, the greater portion going to Saharanpur. Pargana Patehar, which had existed since the days of Akbar and been founded by Anwar Khan from the lands of Behat Kanjaware in the days of Najib-ud-daula and comprised 31 villages between the Eastern Yamuna canal, the Maskara stream and the Yamuna, was divided between parganas of Sultanpur and Faizabad. The pargana of Jahangirabad, which had been formed from Raipur Tatar in the reign of Shahjahan was abolished and distributed among parganas of Faizabad, Sultanpur and Jwalapur. Pargana Sakrauda, originally separated from Jaurasi by Rao Qutb-ud-din in the time of Zabita Khan, was partly restored to Jaurasi; and partly

to Muzaffarabad. The latter also received pargana Kheri, which was separated from Roorkee during the same period. Pargana Jamalgarh, which was formed from Gangoh by Jamal Khan in the time of Najib-ud-daula, was given to Nakur. Pargana Lakhnautia was broken up, 57 villages being transferred to Gangoh, seven to Rampur and one to Katha. A number of villages of pargana Nanautia were assigned to Muzaffarnagar and its remaining villages were distributed between Rampur and Gangoh. Chausath Kheri, which consisted of many scattered villages, was absorbed by Rampur and Gangoh, except for 14 villages handed over to Muzaffarnagar. Pargana Thana Bhawan was transferred to Muzaffarnagar with the exception of a few detached villages assigned to those parganas within whose geographical limits they lay. As a result of these changes 134 villages were transferred from this district to Muzaffarnagar and 93 from Muzaffarnagar to this district.

Further extensive changes were made in 1855 when parganas Behat, Jaurasi and Katha were abolished and new parganas of Haraura, Nagal and Bhagwanpur were constituted. By this time the district came into its present shape containing 15 parganas and four tahsils. Nearly all the parganas were broken up to such a degree that it is now impossible to recognise any of the old parganas.

The present pargana of Faizabad was previously called Raipur Tatar, deriving its name from the village of Raipur but the area was small, the southern portion being included in Behat Kanjawan. The name was changed to Faizabad by Shahjahan who built his hunting seat at Badshah Mahal which, it is said, was made the capital of a sirkar in spite of its inconvenient location. In 1842 its area was extended by the inclusion of villages from the abolished parganas of Patehar and Jahangirabad though at the same time several villages were transferred to Muzaffarabad. In 1855 pargana Behat Kanjawan was absorbed in the surrounding parganas and of its 91 villages, 25 were assigned to Faizabad, three to Sultanpur and one to Saharanpur.

Pargana Muzaffarabad was a smaller *mahal* during the days of Akbar. In 1842, pargana Kheri was detached from Roorkee and attached with Muzaffarabad, and a number of villages were added to it from Faizabad, Behat Kanjawan and Sultanpur, while others were assigned to Saharanpur. In 1855, Muzaffarabad contributed 63 villages to the new pargana of Haraura, 17 to Bhagwanpur, 4 to Saharanpur and one detached village to Sarsawa and received 57 villages from Behat Kanjawan and six villages from Saharanpur.

Pargana Haraura was formed in 1855, out of 63 villages from Muzaffarabad, 28 from Roorkee, 23 from Saharanpur, 21 from Deoband, while one in either case came from Faizabad and the abolished pargana of Jaurasi.

Pargana Bhagwanpur was also formed in 1855 out of 22 villages of the abolished pargana of Jaurasi, 17 of Muzaffarabad, 69 of Roorkee, 19 of Manglaur and one of Deoband.

The pargana of Jwalapur went by the name of Bhogpur in the days of Akbar, no change of importance took place in its boundary till 1855 when two villages were transferred to Roorkee, while 17 were received from that pargana and 13 from Jaurasi.

Pargana Manglaur is of an ancient date, but has been subjected to several alterations, the first of importance being the exchange of five villages with Muzaffarnagar. In 1855, the pargana received two villages from Deoband, 24 from Roorkee and 26 from Jaurasi while 19 villages were transferred to Bhagwanpur.

The pargana of Roorkee, a large *mahal* in the days of Akbar, was reduced under the Rohillas by the formation of Kheri, which in 1842 was assigned to Muzaffarabad. At the same time considerable additions were made from Deoband and other parganas. Further changes took place in 1855, when 69 villages were given to the new pargana of Bhagwanpur, 28 to Haraura, 24 to Manglaur and 17 to Jwalapur. On the other hand two villages were received from Jwalapur and 91 from Jaurasi. The latter, which was an old pargana of Akbar's days, had been reduced in the time of Zabita Khan by the formation of Sakrauda, the estate of Rao Qutb-ud-din, though in 1842 this was broken up and for the most part restored to Jaurasi. In 1855 when pargana Jaurasi was abolished 26 villages went to Manglaur, 22 to Bhagwanpur, 13 to Jwalapur, one to Haraura and all the remaining villages to Roorkee.

The pargana of Deoband was much larger in the days of Akbar than at present. In the days of Najib-ud-daula a part of the pargana was separated to constitute the pargana of Katha. In 1841 eleven villages were transferred to district Muzaffarnagar and four were received in exchange. In 1855 pargana Nagal was formed, mainly from Deoband, which then lost 113 villages, while 21 were assigned to Haraura, two to Manglaur and one each to Rampur and Bhagwanpur. On the other hand 20 villages were restored from Katha, and three from Rampur.

Pargana Rampur, a *mahal* in the days of Akbar, received seven villages from district Muzaffarnagar in 1842 while one was transferred to that district. In 1855 eight villages were received from Katha, seven from Gangoh, three from Saharanpur and one from Deoband, while three were transferred to Nagal, eleven to Gangoh, six to Saharanpur, three to Deoband and two to Nakur.

The pargana of Sultanpur was originally included in the *mahal* of Behat Kanjaware. The name was changed to Sultanpur Behat in the days

of Shahjahan. It was divided by Najib-ud-daula into two separate parganas, Sultanpur and Behat, which remained distinct thereafter. In 1842, the area was increased by the addition of some villages from the old parganas of Patehar and Jahangirabad, though this was discounted by the transfer of an equal size to Faizabad and Muzaffarabad. In 1855 three villages were transferred to Faizabad and one each to Sarsawa and Saharanpur; while at the same time 44 villages were received from Sarsawa and one from Behat.

Pargana Sarsawa also underwent certain changes in 1842, though these were unimportant as compared with the alterations that took place in 1855 when 44 villages were transferred to Sultanpur and two to Nakur, while in exchange Sarsawa received 48 villages from Nakur, 14 from Saharanpur and one each from Sultanpur and Muzaffarabad.

In the early days of British rule great changes took place in the boundary of pargana Nakur. A number of villages were lost in 1842 while more extensive alterations were effected in 1855. As many as 48 villages were transferred to Sarsawa, two to Saharanpur and one to Gangoh, while 52 were received from Gangoh and two each from Sarsawa and Rampur.

The pargana of Gangoh was also in existence in Akbar's days. In 1842 pargana Lakhnautia was abolished and 57 of its component villages were added to Gangoh. At the same time other additions were made, chiefly from Nanautia, while Jamalgarh was assigned to Nakur and certain villages were given to Muzaffarnagar. In 1855 as many as 52 villages were transferred to Nakur and seven to Rampur, while the former gave one and the latter eleven villages in return.

The pargana of Saharanpur as a fiscal unit dates back at least from the time of Akbar. At the general reconstitution of boundaries in 1842 it received portions of taluka Patehar separated from Sultanpur Behat in the days of Najib-ud-daula. Other additions comprised a large part of Malhipur, a tract lying to the east of Saharanpur and containing a number of scattered villages, and most of the pargana of Jahangirabad. In 1855, as many as 23 villages were transferred to Haraura, 14 to Sarsawa, six to Muzaffarabad, three to Rampur and two to Sultanpur while eight villages were added to the pargana from Faizabad, six from Rampur, four from Muzaffarabad, two from Nakur and one from Sultanpur.

After 1855 no change of any importance appears to have occurred in the administrative history of the district.

Subdivisions, Tahsils and Thanas

The district is divided into four subdivisions, Saharanpur, Nakur, Deoband and Roorkee. Each subdivision also forms a tahsil for purposes of revenue administration.

The tahsil of Saharanpur, which comprises the central and north-western portion of the district includes four parganas of Saharanpur, Haraura, Muzaffarabad and Faizabad. It occupies a large stretch of country of a somewhat irregular shape, with an area of 1,702.4 sq. km. In 1971, its population was 6,55,237 (females 2,97,443), the rural population being 4,29,841 (females 1,95,074) and the urban 2,25,396 (females 1,02,369). It is bounded on the north by the crest of the Siwalik range, beyond which lies the district of Dehra Dun. On the east lies pargana Bhagwanpur of tahsil Roorkee and on the south exist the parganas of Nagal and Rampur of tahsil Deoband. The western boundary is formed partly by tahsil Nakur and partly by the Yamuna river which separates it from district Ambala in the Haryana State. Here the State boundary is not determined by the deep-stream rule but has been artificially demarcated since the time of the Settlement of 1888. There are 1,688 inhabited, 481 uninhabited villages and 10 towns in this tahsil.

Tahsil Nakur, which includes pargana Sultanpur, Sarsawa, Nakur and Gangoh, comprises a long and narrow stretch of country lying between the Western Yamuna canal and the Yamuna which separates it from districts Ambala and Karnal in the Haryana State. It extends from pargana Faizabad of tahsil Saharanpur on the north to the boundary of district Muzaffarnagar on the south, while on the east lie the parganas of Saharanpur of tahsil Saharanpur and Rampur of tahsil Deoband. In 1971 it had an area of 1,074.6 sq. km. and a population of 3,54,156 (females 1,60,491), the rural population being 3,21,486 (females 1,45,327) and the urban 32,670 (females 15,164) and contained 412 inhabited, 135 uninhabited villages and 2 towns.

Tahsil Deoband, which occupies the south-central portion of the district, comprises the parganas of Deoband, Nagal and Rampur and is bounded on the north by tahsil Saharanpur, on the east by tahsil Roorkee, on the south by district Muzaffarnagar and on the west by tahsil Nakur. In 1971 it had an area of 1,004.4 sq. km. and a population of 4,04,838 (females 1,83,217), the rural population being 3,53,647 (females 1,60,066) and the urban 51,191 (females 23,151). There are 329 inhabited, 96 uninhabited villages and 2 towns in the tahsil.

Tahsil Roorkee, comprising the eastern portion of the district, includes the parganas of Roorkee, Manglaur, Jwalapur and Bhagwanpur. It is bounded on the north by the crest of the Siwalik range, which separates it from district Dehra Dun, on the east by the Ganga beyond which lies the district of Bijnor, on the south by district Muzaffarnagar, and on the west by tahsils Deoband and Saharanpur. It contains 433 inhabited, 115 uninhabited villages and 5 towns. The area of the tahsil is 1,735 sq. km. and in 1971 its population was 6,40,603 (females 2,85,198), the rural population being 4,67,053 (females 2,12,199) and the urban 1,73,550 (females 72,999).

Thana—There are 18 thanas (police-stations) in the district of which five are located in tahsil Saharanpur, three in tahsil Nakur, four in tahsil Deoband, and six in tahsil Roorkee.

TOPOGRAPHY

Topographically the district presents much more variety of features than any other district of the Gangetic plain. In the north are the steep hills of the Siwalik chain and below the hills is the submontane and then the terai tract in a modified form, almost in miniature. The rest of the district belongs to the upland *bangar* which is bordered on the west and east respectively by the lowlands of the Yamuna and the Ganga. Thus the district may be divided into six main natural divisions, the Siwaliks, *bhabar*, terai, *bangar*, western lowland or the Yamuna *khadir* and the eastern lowland or the Ganga *khadir*.

The Siwaliks—The Siwalik range appears in a far more marked form in this district than in any other district of Uttar Pradesh. It extends along the northern borders of the district, stretching in a south-easterly direction from the gorge of the Yamuna in the extreme north to that of the Ganga at Hardwar, a distance of about 74 km. The word Siwalik was formerly explained as being equivalent to *Sawalakh*, that is to say the range of 1,25,000 peaks. But it is now recognised as a derivative from the name of the god Siva and is applied to designate the outer and lower ranges of the Himalayas as well as the quite distinct chain to which modern custom has limited the use of the name. The range presents an extremely serrated outline and this feature is constantly exaggerated, owing to the destructibility of the material of which it is composed. Although hardly more than hills in elevation—few peaks, such as the Amsot, Sahansra and Bahansia exceed the altitude of 900 m. In passing through them from the south one finds an endless succession of sharp, towering peaks nearly perpendicular precipices and a very maze of little valleys, and during the season of rains through each small valley there runs a little mountain torrent, the aspect of the range viewed from the north being less imposing. Generally speaking the hills are abrupt and rugged on the southern side with a gentle slope towards the north.

The Siwaliks are quite distinct from the Himalayan system, being composed of conglomerates and sandstones. The sandstone is for the most part so soft as hardly to deserve the name of stone. Easily cut by the falling rain or running water, flanking off from exposure to the atmosphere, it has in the course of ages been moulded by the elements into its present fantastic form. The surface soil in most places is a thin vegetable deposit, bearing a crop of sal, *sain* and other trees, with *chir* on the higher levels and the northern slope. Geologically the Siwaliks are separated from the outer Himalayas by a continuous reverse fault. They fall into three main divisions, the upper Siwalik composing the conglomerates of sand and clay, the middle Siwalik

which consists of sand-rock and the Nahan sandstone. The middle and upper rock stages have yielded a magnificent series of mammalian fossils. The gorges of the Ganga and Yamuna appear to result from transverse faults and the cliffs in these places show the lie of the strata with great clearness.

Submontane Tract or Bhabar—This tract, which is locally known as the *ghar* lies below the hills and attains its maximum individuality in the Garhwal and Kumaun divisions. It is of varying width and throughout its length it is intersected by numerous torrents, dry during the hot weather but carrying a considerable volume of water in the rains, those in the west flowing into the Yamuna, while those in the centre and east flow into the Ganga and its tributaries. Formerly the entire tract was covered with forests. In the western *ghar* a major portion of the forest has been cleared and brought under the plough. The eastern *ghar* consists of a series of high and broken spurs and plateaux which sink abruptly into the *bangar* and are separated from each other by fertile river valleys. In the west and also in the extreme east, the surface is tolerably even, though sloping rapidly to the south and is scored by the many torrent beds. The tract is higher in the west than in the east, the recorded heights being about 333·7 m. at Faizabad, 311·5 m. at Raipur, 271·57 m. at Dhanaura on the southern edge of the belt and 288·95 m. at Jwalapur, on bank of the Ganga. The soil here is light and as a rule shallow, resting on a deep stratum of stone and boulders. The water from the hill streams sinks into the bed of boulders to an enormous depth below the ground, with the result that the construction of wells is either very expensive or else altogether impossible. The proximity to the hills secures a heavy rainfall and the slope of the country obviates the danger of flooding. The soil is fertile and requires little labour. Under favourable circumstances cane of fair quality can be grown without irrigation and wheat, cotton and other staples do well.

Terai—In the south of the *bhabar* tract lies the narrow and moist belt of terai. Here the streams, which sink into the bed of boulders in the *bhabar* tract reappear at the surface and unite together to form rivers. Its general appearance is that of a plain sloping gently to the south and south-east. The country in general is a tract of forest and swamps with scattered patches of cultivation, the chief natural vegetative cover being grass and reeds. It is suitable for grazing, although of late years there has been a large extension of cultivation. The soil of the terai is everywhere a moist alluvial deposit. This terai tract merges rapidly into the upland (*bangar*) which embraces the bulk of the district.

The Upland—This tract has a general slope from north to south, its upper limit running roughly parallel to the Siwaliks. The only inequalities of surface are those caused by the channels of the various rivers, which form the drainage lines and constitute a series of depressions separated from each other by broad strips of high land. The southerly slope of the country is

more rapid in the north than in the south and, as the submontane tract is higher in the west than in the east, the fall in the west is more rapid than in the east. The places lying in the same latitude are at higher altitude in the west than in the east. Rampur which lies about 41 km. west of Manglaur has an altitude of about 266.09 m. while the latter has an altitude of 263.34 m. Along the crests of the slopes into the river beds the soil is usually light and sandy, while it is mainly a productive loam, stiffened by the action of water into clay in the lower levels.

Western Lowland or Yamuna Khadir—This tract lies between the Yamuna and its high bank which is very slightly defined in the north. The high bank first makes its appearance in pargana Faizabad and continues past Sultanpur, Sarsawa, Nakur, Gangoh and Lakhnaut. Though frequently broken and abrupt, it is often sufficiently sloping to be culturable. At several places, however, we find the inner or eastern bank marking the old high bank of the river and skirting the eastern extremities of numerous lakes and depressions, as at Sikri near Chilkana, the Dhulapra lake near Sarsawa, and again near Aghiana to the south-west of Nakur. The *khadir* under the old high bank represents a much older formation, though its origin is doubtless similar to that of the true *khadir* near the present stream of the Yamuna. All along the old high bank lies a belt of stiff swampy clay of varying width, which as a rule produces excellent rice and gives rise to two small streams the Budhi and the Saindh, the tributaries of the Yamuna. Between this line of swamps and the present stream there are numerous depressions marking the beds of abandoned water courses. In these beds the soil is stiff clay, but elsewhere it is light loam. In places the *khadir* includes patches of sand or sometimes is more or less infected with *reh*. The breadth of the tract varies from 3 km. to 8 km. In the beginning of the present century there remained a large area of culturable waste specially in the southern part of the tract but now its major portion has been gradually reclaimed for agricultural purposes.

Eastern Lowland or Ganga Khadir—This tract, which is drained by the Solani, the Ratmau and other streams as well as the Ganga, lies between the high bank overlooking the Solani and the present stream of the Ganga and extends southward from the foot of the hills. It comprises the entire pargana of Jwalapur and most of the parganas of Bhagwanpur and Manglaur. In the north the high bank is not well-defined and the transition from upland to lowland is very gradual but it steadily increases in height and steepness as one proceeds southward, while the ravines increase in frequency and length. The character of the eastern lowland varies from place to place, the soil ranging from almost pure sand in the ridges between the various torrent beds to the stiff clay of the numerous swamps. There is a considerable extent of forest as well as of open grass here than in the adjoining district of Muzaffarnagar. The eastern lowland is much inferior to the western. A considerable part of the tract suffers from flooding, erosion and saturation.

RIVER SYSTEMS AND WATER RESOURCES

The rivers and streams of the district are all included in the two river systems, the Ganga and the Yamuna. The watershed which runs parallel to the high bank of the Solani from Shahjahanpur, at the foot of the Siwaliks, through the parganas of Muzaffarabad, Haraura, Bhagwanpur and Manglaur divides the district into two unequal parts and confines the discharge into the Ganga to the eastern lowland. The surface water to the west of the watershed makes its escape southwards and ultimately south-westward into the Hindan and thus into the Yamuna. The Yamuna system is divided into several subsidiary systems by the principal affluents of the river. These streams drain the upland and in most cases pass southwards into district Muzaffarnagar to unite with Hindan, which may be considered the arterial drainage line of the upland tract in the northern portion of the upper doab.

The Ganga—This river first touches the district at Hardwar, about 288 km. from its source at Gaumukh in upper Himalayas and runs southward forming the eastern boundary of the district, the course of the deep stream being the dividing line between the districts of Saharanpur and Bijnor. Near Hardwar it debouches on the plains through a well-marked gorge in the Siwalik chain. The gorge is about a kilometre and a half in width at its narrowest point. The river flows here in a series of channels separated from each other by aits, most of which are well-wooded and are of sufficient height, and beyond the reach of the annual floods except on extraordinary occasions. The main stream which is known here as the Nildhara flows close under the Chandi hill while the principal branch passes directly under the town of Hardwar, joining the former at Kankhal, about 3 km. south of Hardwar. Below Hardwar the bed of the river is composed of boulders including a small portion of limestone. The boulders disappear about 19 km. below Hardwar, being gradually replaced by sand. The Ganga leaves the district in the extreme south of pargana Jwalapur about 5 km. south of the village of Niranjapur. The width of the channel varies considerably. Usually the bank is high on one side and low or shelving on the other but the stream has a far from stable course and is apt to change greatly through annual floods. The discharge of water which is minimum in January is doubled by March and increases during the summer months with the melting of the snows in the Himalayas, and ultimately reaches its maximum during the rains. The difference between the highest and lowest discharge is extraordinary.

Tributaries of the Ganga

Banganga—This stream, which is in reality a backwater of the Ganga, represents an abandoned bed of that river. It leaves the main stream about 1 km. south of Kankhal and runs southward through the *khadir* of pargana

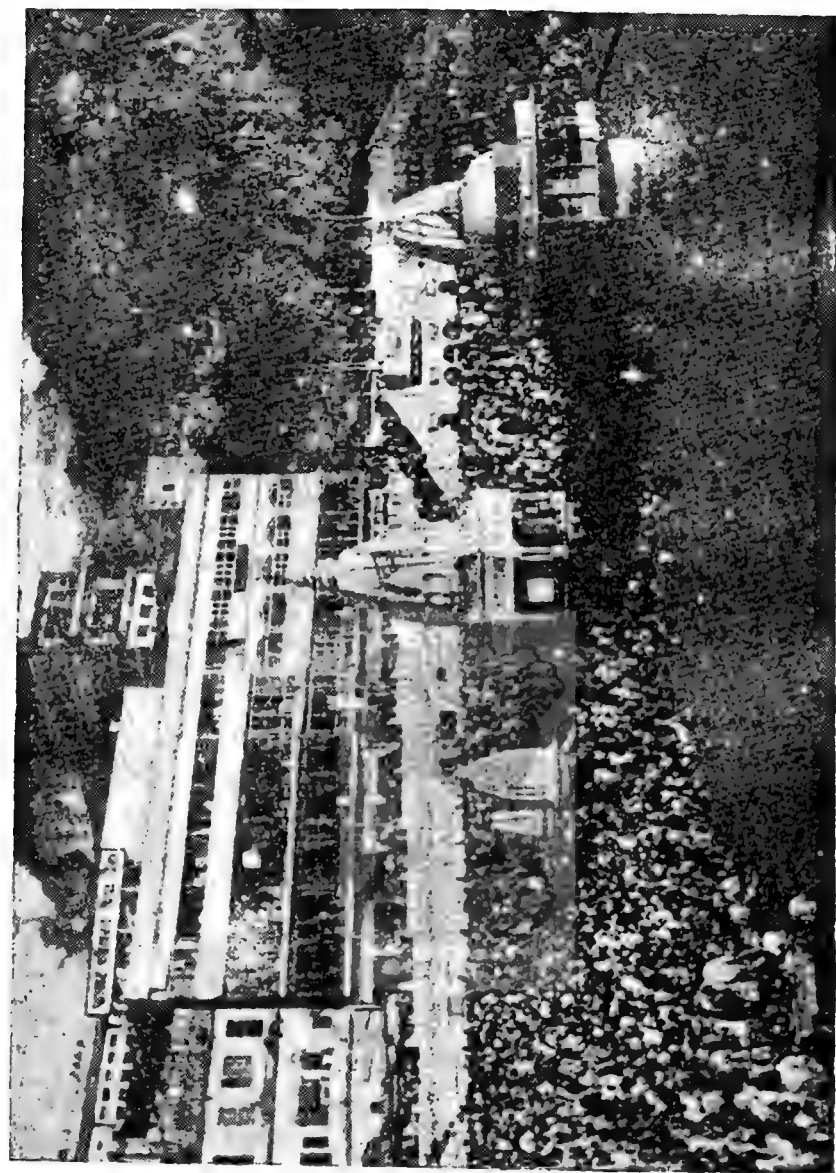
Jwalapur. Near Bhogpur it takes a south-easterly course as far as Raisi railway station where it is joined by the Pathri Rau on its right bank and then flowing southward for about 3 km. leaves this district to join the Ganga at Chandpuri in district Muzaffarnagar.

Pathri Rau—This torrent with a catchment area of 205 sq. km. is the chief tributary of the Banganga and is formed by the combination of several watercourses in the hilly tract of pargana Bhagwanpur. It flows southward through the pargana across the Ganga canal. Flowing on in the same direction it forms the boundary between pargana Bhagwanpur on the right and pargana Jwalapur on the left. It is joined by the Ranipur Rau on its left at a point where the boundaries of parganas Bhagwanpur, Manglaur and Jwalapur meet. The combined stream runs south-eastward separating pargana Manglaur on the right from pargana Jwalapur on the left for about 6 km. and then enters pargana Jwalapur to join the Banganga near the Raisi railway station.

Ranipur Rau—It is formed by the confluence of several streams that drain the hills to the north of pargana Jwalapur and flows southward in a broad bed crossing the Ganga canal near Bahadurabad after which it runs south-eastward through the Pathri forest where it becomes a sluggish stream, generally known as the Patharwa. It joins the Pathri Rau on the western border of the forest at a point where the boundaries of parganas Bhagwanpur, Manglaur and Jwalapur meet. Both the streams, the Pathri Rau and the Ranipur Rau, after their entry into the *khadir* tract serve a useful purpose in draining the marshy sand in and near the Pathri forest ; their beds, though narrow, are deep and well defined and as a rule do no damage, it is only when the waters are held up by the Banganga flood that they are apt to inundate the tract in their vicinity.

Hadwaha—This stream which is a small tributary of the Banganga rises in a clay tract in the south-east corner of pargana Roorkee and flows southward in a shallow bed past Laksar into district Muzaffarnagar where it joins the Banganga.

Solani—It is at first a mere torrent but gradually becomes a river of considerable magnitude and importance. The stream is formed by the union of the Chilawala, Kania, Sukh and Mohand Raus, which drain the submontane tract immediately to the east of the Mohand road. Near Thapal Ismailpur it is joined by the Rajwa and Khandur Raus, the former being of little importance while the latter is of considerable size, carrying the combined waters of the Khujnawar and Shahjahanpur Raus as also of the Hatni Sot and other streams. The whole is then known as the Solani, which flows in a south-easterly direction under the high bank that marks the eastern limit of the upland plain. Just above the town of Roorkee the Solani receives on its left bank the Sipia, a watercourse of considerable



Har-ki-Pairi, Hardwar

length that rises in the ravines of Sakrauda plateau and is fed by several affluents such as the Haljaura, the Jakni and the Dhandora, all of which carry water only in the rains. At Roorkee the Solani passes under the great canal aqueduct and flows in a south-easterly direction to the northern border of pargana Manglaur where it receives the Ratmau on its left bank. From this point onwards the river flows southward through the *khadir* tract keeping close to the high bank till it finally passes into district Muzaffarnagar. Though of no great size in the cold weather the Solani occupies a wide bed when in flood, and has done considerable damage to the lowlands on its banks by erosions and change of courses. The only tributary of the Solani on its left bank is the Bhat, a small stream, which carries down the drainage of the eastern upland of pargana Manglaur. It is very destructive and has done much damage in its immediate vicinity.

Ratmau—From the western watershed to the Pathri the ground slopes gently to the basin of the Ratmau. This stream with a catchment area of about 323 sq. km. is formed by the union of a large number of hill torrents which drain the outer Siwaliks and the submontane forest tract of Sakrauda and Kansrao. The chief of these, beginning from the east, are the Gholna, Betban, Kalatira, Sindliwala, Bam, Kaniawala, Malowala, Dholkhand, Andheri and Gaj Raus. The name Ratmau is generally given to the union of the Dholkhand and Andheri, the others joining it at various points between the junction and the canal crossing at Dhanaura. The torrent, flowing generally in a southerly direction, has a wide bed and is bounded on the west by the ridge of the high land that extends southwards to within a short distance of pargana Roorkee. Leaving this at Rahmatpur, the stream takes its course through the Ganga *khadir* till it joins the Solani on the northern boundary of pargana Manglaur.

Yamuna—It first touches the district in the extreme north of pargana Faizabad, passing south-westward through a gorge in the Siwaliks at Khara about 197 km. from its source. The valley is bolder and more varied in scenery than that of the Ganga, but possesses the same general characteristics, the stream flowing in a succession of boulder-strewn rapids. On emerging from the hills the valley expands and the river separates into several channels, one on the right bank entering district Ambala and rejoining the main stream about 29 km. lower down, while another known as the Budhi Yamuna branches off to the east near Faizabad. The main stream flows south-westward in a wide bed with constantly shifting channel, along the western boundary of the district which it leaves at the south-eastern extremity of pargana Gangoh. The character of the bed rapidly changes, the boulders giving place to sand and sand to mud. The river attains very large dimensions in the rainy season but does little damage to the lowlands in its vicinity, since they are mostly uncultivated and covered either with barren sand or tamarisk forest. The numerous changes effected by the river

in former days are illustrated by the presence of backwaters and depressions in the *khadir*, which still hold a good deal of water during the rains.

Tributaries of Yamuna

Budhi Yamuna—It is a backwater of the Yamuna, which branches off to the east near Faizabad. The stream running south-westward is utilised for the eastern Yamuna canal as far as Nayashahr after which it forms a canal escape and generally carries but a small volume of water. In its lower reaches it is known as the Sapolia and joins the main stream near Chauri in pargana Sultanpur. The Budhi Yamuna receives on its left bank a large number of hill torrents which bring down the drainage from the north-western Siwaliks. They do a great deal of damage to the lands in their vicinity. The first of these torrents, beginning from the west, is the Badshahibagh Rau, called after the place of that name. In the hills it marks the course of the Chakrata road, and at the foot it leads south-west to the Yamuna canal at Nurpur Hussainpur about 3 km. south of Faizabad. Next is the Raipur torrent and then the Naugaon, a much larger stream which is formed by the union of the Khaironwala, Barkala, Kasumri and other Raus, and is carried across the Yamuna canal by means of the Naugaon dam to the north of Behat, whence it goes westwards into the Budhi Yamuna. In the latter portion of its course the channel has been much improved, so as to obviate much of the damage done by flooding in the neighbouring villages of pargana Faizabad. The Maskara, the last tributary of the Budhi Yamuna, originates in the Jasmaur and the Sahansra Raus which unite near Jasmaur in pargana Muzaffarabad. The united stream flows south-westwards in a broad bed to the canal at Kalsia below which it is used as a canal escape and passes in a well-defined channel through parganas Faizabad and Sultanpur, keeping close to the high bank of the Yamuna till it enters the lowland to join the Budhi Yamuna just above its confluence with the Yamuna.

Budhi—This stream rises in the basins of the Abdullahpur and Chilkana lakes and flows south-westwards in a tortuous course along the high bank of the Yamuna, past Sarsawa and thence as far as Gokulpur, where it crosses the lowland to join the Yamuna at Fatehpur Jat. The course of the stream is somewhat ill-defined in the lowland tract and the channel is apt to vary. The stream serves a useful purpose as a drainage line.

Saindhi—Rising in a large crescent-shaped lake near Kalheri this stream flows southward through pargana Nakur. It is reinforced by some of the drainage from the Kumharhera lake, which finds its way with difficulty through the uplands and joins the Saindhi near Meghan Mazra. From this point the Saindhi flows below the old high bank of the Yamuna past Lakhnauta and Kunda where it leaves this district to meet the Yamuna in district Muzaffarnagar.

Katha—This stream which rises in the north-east of pargana Nakur runs in a narrow and tortuous course through pargana Gangoh, being supplied with water from an extensive lowlying tract in both the parganas. In the past large sums were expended in deepening and straightening its bed but it is still a very inefficient drainage channel, a considerable portion of its basin being swampy and unculturable. The stream leaves the district near Titron, and eventually makes its way into the Yamuna in district Muzaffarnagar.

Hindan—The name Hindan is at first applied to a small stream which rises near Aurangabad but the bulk of the water is derived from a torrent known in its upper course as the Kaluwala Rau and afterwards as the Chahicha which receives the Khokra on its left bank at Khujnawar and joins the Hindan on the northern boundary of pargana Haraura. From this point it flows south-westwards across that pargana to the western border and then running southwards separates parganas Saharanpur and Rampur from parganas Haraura and Nagal. The river afterwards enters pargana Nagal and flows southwards through pargana Deoband into district Muzaffarnagar. In its course through the plains the Hindan has a well-defined bed and its banks in most places are high and steep, with a stretch of light sandy soil on their crests. In pargana Deoband the bed widens out to a considerable extent leaving a strip of inferior alluvium on either side. Further north the area of alluvial land is very small, though in many places it is of considerable value; elsewhere it is covered with sand but even then it is profitably utilised for melon cultivation. Floods are of somewhat frequent occurrence, but as a rule damage caused by them is slight and the effects of erosion are never serious.

The river has no tributary on its left bank within the limits of this district, with the exception of two small streams known as the Nalhera and the Sohagni after the villages in which they rise. They carry down the drainage from the uplands in the south-west of pargana Nagal but have little effect on the country through which they pass. On its right bank the Hindan receives the waters of the Nagdeo and the Dhamola respectively at Ghagreki and Firozpur Nandi, both in pargana Saharanpur. The other tributaries of the Hindan running through the district are the Kali Nadi (west) Kali (Krisana) and Krisani which join it beyond the southern boundary of the district.

Nagdeo—This stream, the first important tributary of the Hindan on its right bank, originates in the Kotri Rau in the Siwaliks to the north of pargana Muzaffarabad and runs south-westwards in a narrow bed with an insignificant volume of water. After passing along the boundary between parganas Saharanpur and Haraura it meets the Hindan at Ghagreki, a few kilometres south-east of Saharanpur.

Dhamola—It rises in the outer edge of the submontane tract near Jasmaur in pargana Muzaffarabad and runs in a south-westerly direction, traversing the town of Saharanpur where it picks up much of the drainage and is joined by an insignificant rivulet known as the Pandhoi. From Saharanpur it flows in a southerly course through pargana Saharanpur to join the Hindan at Firozpur Nandi in the south-eastern corner of the pargana.

Kali Nadi (West)—This river originates in two streams, both known by the same name, which rise in the northern part of pargana Haraura and, running southward, unite in pargana Nagal close to the point where the Deoband canal is carried over the river. Of the two branches, the eastern is the larger and possesses a deeper channel, with fairly high banks crowned with a narrow belt of light sandy soil. After their junction the river attains a considerable size, and the bed increases in width and depth. In the north of pargana Deoband it is reinforced by the Khala, a small stream, which rises near Jataul and drains the south-eastern part of pargana Nagal. At Mahtauli, where the river passes into district Muzaffarnagar it receives on its left bank the Sila, a large watercourse that originates in the south of pargana Bhagwanpur and runs between high and well marked banks through the west of pargana Manglaur and the east of pargana Deoband. The Imlia, another tributary of the Kali, rises to the south-east of Deoband, of which town it carries off the drainage by means of artificial channels. During the rains the volume is very large causing much damage to the neighbouring tract. The Imlia runs almost due south, past Rankhandi into district Muzaffarnagar, and joins the Kali on its right bank a few kilometres beyond the southern boundary of the district.

Kali (Krisana)—It is a small stream that has its source in a depression near Pahansu in the north-east corner of pargana Rampur and runs southwards in a narrow but well-defined bed, keeping almost parallel to the Hindan. It joins the Hindan at Dudhi in district Muzaffarnagar short distance beyond the southern boundary of the district.

Krisani—This stream, also known as the Karsuni or Krishni is at first of insignificant dimensions, but is reinforced by a large amount of escape water from the canal and drainage from the land in its vicinity. It rises in the southern part of pargana Saharanpur and has been connected for drainage purposes with the old channel of the eastern Yamuna canal. Passing southward through the centre of pargana Rampur its bed broadens out so as to leave on either side a strip of alluvial land, fertile in places but liable to submersion during the rains. It receives the escape water from the canal near Nanauta and soon afterwards enters district Muzaffarnagar to join the Hindan. Though a considerable portion of the river has been realigned and the channel straightened and deepened, yet in wet years it receives more water than it can carry.

Lakes—The district possesses a large number of swamps, lakes and ponds. In the upland tract the only lakes are those of Dhulapra and Kumharhera. The others are unimportant, as they are seldom of any size and their influence is purely local. In the lowlands of the Yamuna and the Ganga, there are many extensive swamps. Among the most notable are the Sultanpur, Kulheri and Aghiana lakes in the Yamuna *khadir* and the Patti swamp in pargana Jwalapur in the Ganga *khadir*.

GEOLOGY

The district, forming part of the Indo-Gangetic alluvial tract in the south and the Siwalik hills in the north, comprises the following succession of rock-groups arranged in order of increasing age from top to bottom :

Rock-groups	Age
Alluvium, Gravel, etc.	Recent
Bhabar and Terai	Pleistocene
Siwaliks	Plio-Pleistocene to Miocene
Base not exposed	

Siwaliks—The Siwaliks mainly consist of sandstones, grits, conglomerates, pseudo-conglomerates, clays and silts having the characters of fluvial deposits of torrential streams and floods in shallow fresh-water basins. The sandstones show poor stratification and are generally ungraded as to grain size. They are felspathic, micaceous and current bedded. The fossils included in the Siwaliks show that the earlier beds were deposited in a somewhat brackish environment as compared with the later ones. Some of the latest deposits may be continental i.e., left on dry land by temporary heavy floods. There is a considerable amount of ferruginated matters, especially in some of the older horizons which indicates that the sediments were derived partly from an old and well exposed terrain.

The organic remains of Siwalik include plants, mollusca, fish, reptiles and mammals. The petrified remnants of vertebrate fossils is the characteristic feature of these formations.

Bhabar and Terai—The Siwalik hills on the southern side are fringed by talus fans. The upper portion of the talus fans is composed of rock fragments, gravel and soil and supports good forests. This zone, known as the *bhabar*, has a vertical extent of less than 300 m. between its upper and lower limits.

The terai tract lies immediately to the south of the *bhabar*. It is composed of gravel and soil at places forming a marshy tract overgrown with grass and jungle.

Alluvium and Gravel—Further south of the terai belt there occurs the alluvial tract of the Ganga and its tributaries. The sediments are sands, silts and clays with occasional gravel beds.

Geohydrology

The area hydrologically embraces the *bhabar*-terai region and the adjoining alluvial plains of the Ganga.

The *bhabar* belt lies along the northern fringe of the district south of Siwalik hills, and constitutes the chief intake zone. Groundwater in this zone occurs under unconfined conditions. The water-table slopes in a southerly direction, roughly conforming to surface topography. Depth of water, which is deep in the upper portions of the belt, ranges from 25 to 59 m. below the ground level. However, it becomes comparatively shallow and rests within 7 m. from the ground level in the peripheral portions. In the peripheral portions of this belt, the deeper aquifers probably occur under low-confined conditions due to intercalations of confining clay beds which taper off up dip. Tube-wells, drilled in this belt to depths ranging from 72 to 110 m. yield between 99,000 and 1,82,160 litres of water per hour, at moderate draw-downs. Perched water may be expected in the upper portions of the *bhabar* belt due to the presence of thin boulder clay lenticles which may intercept or retard the downward gravity movement of the water.

Terai forms a narrow belt south of the *bhabar* zone and is separated from the latter by a 'spring line' which forms the intersection of water-table with surface slope. Effluent seepage of groundwater through a number of springs and leakage of confined water from deeper aquifers through semi-permeable mixed zones in places produce shallow water-table and even swampy conditions in the belt. The terai belt merges imperceptibly further south into the Gangetic alluvium.

Groundwater in the terai belt and the Gangetic alluvial plains occurs under water-table as well as confined conditions. The near surface groundwater is unconfined. The zone of saturation is formed by silt and sands. Water-table generally slopes in a southerly direction, locally affected by surface water bodies like streams where effluent seepage of groundwater occurs.

Depth of water in the open wells ranges from 1.5 to 35 m. below ground level. Groundwater in the deeper aquifers occurs under confined conditions. The static water level in the tube-wells, constructed down to a maximum depth of 198 m. below ground level, generally rests between 5 and 9 m. below ground level. Artesian flow has, however, been

struck in some tube-wells in the terai belt within a depth of 150 m. from ground surface. The discharge by natural flow from these wells is 280 to 300 litres per minute. Discharge from pumped wells ranges between 1,500 and 3,025 litres per minute and their specific capacity from 300 to 650 litres per minute per metre of draw-down.

Large-scale groundwater development is possible in the southern portion of the *bhabar* belt and the whole of the terai belt and adjoining Gangetic alluvium in the district. Groundwater in these areas is fresh and potable.

Minerals

No mineral occurrences have been reported from the district. However, some gravels and pebbles are locally used for building purposes. Some minor occurrences of *reh* are found locally.

Seismology

The district was affected by the Kangra earthquake of 14th April, 1905 and lies within isoseismals VII and VIII of this earthquake. In the seismic zone map of India the district lies at the border of zone III and zone IV.

CLIMATE

The climate of the district is characterised by general dryness (except in the brief monsoon season), a bracing cold season and a hot summer. The year may be divided into four seasons. The cold season from about the middle of November to February is followed by the hot season lasting till the end of June. The period from July to about the middle of September constitutes the monsoon season. The post-monsoon or transition season is from mid-September to the middle of November.

Rainfall—Records of rainfall in the district are available for 11 stations namely Saharanpur, Roorkee, Nakur, Deoband, Hardwar, Muhammadpur, Nayashahr, Jarauda, Kairia, Kuankhera, Salimpur, for 75 years. The normal or the average annual rainfall in the district is 949.3 mm. The rainfall generally increases from the south-west towards the north-east and varies from 710.4 mm. at Jarauda to 1,301.0 mm. at Nayashahr. About 83 per cent of the annual rainfall in the district is received from June to September, July and August being the rainiest months. The variation in the annual rainfall from year to year is appreciable. In the fifty-year period, 1901 to 1950, the highest annual rainfall in the district, amounting to 172 per cent of the normal, occurred in 1942. The lowest annual rainfall, amounting to 44 per cent of the normal, occurred in 1918. In the same fifty-year period, the annual rainfall in the district was less than 80 per cent of the normal in 9 years, two of them being consecutive. Considering the

annual rainfall at the individual stations, two consecutive years of such low rainfall occurred twice each at Hardwar, Jarauda and Salimpur, and once at six out of the eight remaining stations. Even three consecutive years of such low rainfall occurred twice at Nayashahr and once at Saharanpur. Nakur and Kuankhera had four consecutive years of such low rainfall once. The following statement shows that in 29 years out of the fifty, the rainfall in the district was between 900 mm. and 1,300 mm.

Frequency of Annual Rainfall in the District (1901—1950)

Range in mm.	No. of years	Range in mm.	No. of years
401—500	1	1101—1200	6
501—600	2	1201—1300	5
601—700	2	1301—1400	0
701—800	8	1401—1500	0
801—900	7	1501—1600	0
901—1000	10	1601—1700	1
1001—1100	8		

On an average there are 43 rainy days (i.e. days with rainfall of 2·5 mm. or more) in a year in the district. This number varies from 32 at Jarauda to 56 at Hardwar.

The heaviest rainfall in 24 hours recorded at any station in the district was 495·3 mm. at Hardwar on 18th September, 1880.

Temperature—There is a meteorological observatory in the district at Roorkee, the records of which may be taken as representative of the meteorological conditions prevailing in the district. From about the end of February, temperatures begin to increase rapidly. May and June are the hottest months with the mean daily maximum temperature around 39°C. and the mean daily minimum around 25°C. Nights in June are slightly warmer than during May. The heat in summer is intense and the maximum temperature on individual days goes up to 45°C. and over. Afternoon thunder-showers which occur on some days bring welcome relief though only temporarily. With the onset of the monsoon by about the beginning of July there is appreciable drop in the day temperatures. But nights continue to be as warm as during the later part of the summer season. There is a slight increase in the day temperatures in September but the night temperatures begin to decrease. After October temperatures decrease, the drop in the night temperatures being very rapid. January is generally the coldest month with the mean daily maximum at 20·1°C. and the mean daily minimum at 6·6°C. During the cold season, in association with passing western

disturbances, cold waves affect the district, the minimum temperature occasionally dropping down to about a degree or two below the freezing point of water. Frosts occur on such occasions.

The highest maximum temperature recorded at Roorkee was 46.7°C. on 13th June, 1932. The lowest minimum was 2.2°C. on 2nd February, 1905.

Humidity—The humidity is high during the south-west monsoon season. Thereafter humidities decrease. The driest part of the year is the summer season particularly April and May when the relative humidities in the afternoons become less than 25 per cent.

Cloudiness—During the monsoon season and for brief spells of a day or two, in association with passing western disturbances during the cold season, heavily clouded or overcast skies prevail. In the rest of the year the skies are generally clear or lightly clouded.

Winds—Winds are generally light with some increase in force during the later summer and monsoon season. Winds blow predominantly from north-west from November to April. By April south-easterlies also appear and in the next four months winds are mostly from the south-east, winds from the north-west blowing on some days in the afternoons. The following statement gives the monthwise mean wind speed and the annual mean wind speed for the district :

Months	Mean wind speed in km. per hour
January	4.0
February	4.8
March	5.4
April	6.1
May	7.2
June	7.3
July	5.8
August	4.6
September	4.2
October	3.2
November	2.6
December	3.1
Annual	4.9

Special Weather Phenomena—In the cold season passing western disturbances affect the weather over the district causing a few thunder-storms, some of which are accompanied with hail. Dust-storms and thunder-storms occur during the hot season. Rain during the monsoon season is often associated with thunder. Fog occurs occasionally during the cold season. The frequency of special weather phenomena for Roorkee is given in the following statement :

Months	Mean number of days with				
	Thunder	Hail	Dust-storm	Squall	Fog
January	2.0	0.3	0.0	0.0	0.7
February	3.0	0.3	0.1	0.0	0.3
March	2.0	0.2	0.1	0.0	0.0
April	1.9	0.2	0.1	0.0	0.0
May	5.0	0.1	0.9	0.0	0.1
June	5.0	0.0	1.1	0.0	0.0
July	8.0	0.5	0.2	0.0	0.0
August	7.0	0.5	0.0	0.0	0.0
September	3.0	0.1	0.1	0.0	0.0
October	1.3	0.0	0.0	0.0	0.0
November	0.4	0.0	0.1	0.0	0.0
December	0.4	0.0	0.0	0.0	0.4
Annual	39.0	2.2	2.7	0.0	1.5

FLORA

In days of yore the area occupied by the present district was covered with dense forests. Deoband, an ancient place lying in the southern part of the district is said to have been the residence of the Pandavas during their exile and was then known as Devi-ban, meaning the sacred forest dedicated to some deity. With the increase of population the forests mostly lying in the terai area have been gradually cleared and reclaimed for agricultural purposes.

The total forest area in the district under the forest department comprises 42,589 hectares in tahsil Roorkee and 32,103 hectares in tahsil Saharanpur. The civil and the panchayat forests which are under the control of the district magistrate, occupy an area of 883 hectares. A major portion

of these forests is covered with coarse grass while in the *khadr* tracts scattered patches of dhak and other species are also to be seen.

Taking into consideration the difference in altitude and the climatic conditions the flora of the district may be divided into three main botanical divisions : the moist tropical forests, the tropical dry mixed deciduous forests and the Siwalik *chlr* forests.

Moist Tropical Forests—These forests comprise the moist Siwalik sal forests and the lowlying moist Savannah forests. The moist Siwalik sal forests are confined to a small area in the district and occur in the Nahan sandstone region. The other associated trees which also grow in these forests are the *sida* (*Lagerstroemia parvifolia*), *ghoghar* (*Garuga pinnata*), *haldu* (*Adina cordifolia*), *padal* (*Stereospermum* sp.), *bakli* (*Angelssus latifolia*), *kandla* (*Bauhinia retusa*), *bel* (*Aegle marmelos*), *rohini* (*Mallotus philippinensis*), *chamror* (*Ehretia laevis*), *chilla* (*Carex elliptica*), *dhudhi* (*Wrightia tomentosa*), *sandan* (*Ougeinia dalbergioides*), *kathber* (*Zizyphus nummularia*), *dhaman* (*Grewia clastica*) and the *marorphall* (*Hellcteres Isora*).

The lowlying moist Savannah forests occur in the area which ordinarily remains submerged under water during rainy season but remains dry during the rest of the year. The common species growing in these forests are *sissoo* (*Dalbergia sissoo*), *ber* (*Zizyphus zuzuba*), *kharik* (*Celtis australis*), *maindal* (*Randia dumentorum*), *chilla*, *kaddum* (*Mitragyna parvifolia*) and *kathber*.

Tropical Dry Mixed Deciduous Forests—These forests may be further subdivided into eight vegetative zones, the dry Siwalik sal, the dry plain sal, the dry mixed deciduous forests, the *butea* forests, the bamboo forests, the *khair* (*Acacia catechu*) and *sissoo* forests, the secondary forests and the scrub forests.

The dry plain sal forests occupy the small area of the forests of the district and are mostly confined to the submontane tract. The chief plants growing in these forests are sal (*Shorea robusta*), *sain* or *asan* (*Terminalia tomentosa*), *sandan*, *domsal* (*Milliusa velutina*), *amla*, *dhauri* (*Lagerstroemia parvifolia*), *bel* and *rohini*.

The dry Siwalik sal forests cover the major forest area of the district. The trees found in these forests are sal (*Shorea robusta*), *pipal* or *piyala* (*Buchanania lanzan*), *chlr* (*Pinus roxburghii*), *bakli*, *sain* (*Terminalia tomentosa*), *bahera* (*Terminalia ballrica*), *sandan*, *Kusum* (*Schleichera trijuga*), *amla*, *amaltas* (*Cassia fistula*), *harsingar* (*Nyctanthes arborescens*), *dhawal* (*Woodfordia fruticosa*), *tendu* (*Diospyros tomentosa*), *sakina* (*Indigofera* sp.), *bindu* (*Coolbrookia oppositifolia*), *rohini*, *Isora* (*Cordia dichotoma*) and *bhatta* (*Desmodium puleaceum*).

The dry mixed deciduous forests are found in the hills as well as in the plains. The plants growing in these forests are *sain*, *bakli*, *sandan*, *pipal*, *semal*, *chir*, *pula* (*Kydia calycina*), *gudgudala* (*Streculia villosa*), *amultas*, *bargad* (*Ficus bengalensis*), *padal*, *harsingar*, *khair* (*Acacia catechu*), *jhingan* (*Lannea coromandelica*), *amla*, *kachnar* (*Bauhinia variegata*), *kothber*, *dhaman*, *chamror*, *kusum*, *kaim* and *dhauldak* (*Erythrina subserosa*).

The butea forests are confined to the Pathri, Sahmansoor and Sakrauda forest blocks. The other species of trees growing in these forests are *tracharbi* (*Sapium sebiferam*), *rohini*, *sissoo*, *ber*, *kharik*, *maindal*, *chilla*, *bargad*, *pipal*, *bistendu* (*Bambusa bamboo*) and *maidakilakri* or *garbyaur* (*Litsea glutinosa*).

The bamboo forests are mainly found along the river banks, and on the slopes of the Siwalik hills. The *Dendrocalamus strictus* is the only species which is found naturally. The bamboos found here are of low quality. About 75 per cent of the bamboo clumps have become congested, due to fire, wild elephants and grazing.

The *khair* and *sissoo* forests occur in hills and plains near the river banks. The trees generally found in these forests are *khair* (*Acacia catechu*), *sissoo*, *gular* (*Ficus glomerata*), *chilla*, *ber* and *tun* (*Cedrela toona*).

The secondary forests occur in Teera and Sendhli forest blocks. The plants found in these forests are generally of low value. The chief species of trees growing in these forests are *harsingar*, *beri* (*Zizyphus nummularia*) and *bansa* (*Adhatoda vasica*).

The scrub forests are confined to Hazara, Naurangabad, Sakrauda, Manubas and Papri forest blocks. The vegetative growths consist of thorny shrubs such as *kathber* (*Zizyphus exlopara*), *makoh* (*Zizyphus oenoplia*), *karaunda* (*Cariss spinarum*), *beli* (*Teronia limonia*), *shanda* (*Gurdenia turgida*), *bismar* (*Alangium salvifoliment*), *dhak* and stunted *khair*.

Chir Forests—These forests occur extensively over the Siwaliks but are rarely pure except on higher altitudes. They are chiefly confined to the western and northern aspects of the hills and usually merge with the dry mixed deciduous forests or dry Siwalik sal forests.

Deforestation—At the beginning of the British rule no regard was paid to the forest area and it was left in the possession of the zamindars of the neighbouring villages. Between 1839 and 1860, large forest tracts were leased to persons capable of bringing them under cultivation. One result of this policy was that the cultivation extended to the foot of the hills for about 25 km. to the east of the Yamuna river while the denudation of the country greatly increased the violence of the hill torrents which threaten the safety of the eastern Yamuna canal, necessitating the expenditure of large sums on protective works.

The systematic management of the forests started in 1877 and since then they have been managed scientifically under the different working plans of the forest department. The felling of trees was regulated and prompt and energetic steps were taken to stop deforestation. In 1951 an area of about 6 hectares of forest land was given to the Northern Railway. About 1,751 hectares of forest land was deforested in the Pathri forest block in 1953 and handed over to flood sufferers and ex-soldiers. In 1967, forest land measuring about 45 hectares was deforested and handed over to Bharat Heavy Electricals Limited, Ranipur.

Afforestation—The clearance of forests up to the foot of the Siwaliks has increased the violence of the hill torrents, causing much damage to the land in their vicinity. Therefore, to check the soil erosion, plantations are being raised along the banks of the streams and rivulets particularly in the *bhabar* and *terai* area. An area of about 700 hectares was afforested by the forest department during the Third Plan period. The number of trees planted and their survival in the district since the inception of the Van Mahotsava programme is given in the following statement :

Year	Number of trees	
	Planted	Survival
1950	96	36
1951	134	63
1952	198	58
1953	222	66
1954	326	198
1955	442	217
1956	231	91
1957	552	285
1958	188	114
1959	1,314	727
1960	665	347
1961	323	95
1962	592	186
1963	342	126
1964	150	73

[Continued]

Year	Number of trees	
	Planted	Survival
1965	277	117
1966	363	268
1967	117	80
1968	30	24
1969	161	104
1970	100	57
1971	340	340

Groves—The plantations of groves are never abundant in the neighbourhood of forests where all the wood required for domestic and agricultural purposes can be obtained from natural resources. Yet in the upland parganas almost every village possesses one or more groves. In the submontane and the *khadir* tract the groves are naturally less common save for the gardens of the professional fruit-growers. In 1972-73 the district had an area of about 3,694 hectares under groves, of which tahsil Saharanpur had 1,093 hectares, tahsil Deoband 1,035 hectares, tahsil Roorkee 965 hectares and tahsil Nakur 601 hectares. The district is known for its groves of mangoes, *litchee* and loquat. The plantation of timber trees is not common. The scattered trees to be seen all over the district are usually the sissoo, *siris*, *jamun*, babul and various kinds of fig, such as *gular*, *pipal*, *bargad* and *pakar*.

FAUNA

The fauna of the district is considerably more varied than in other districts of the doab to the south, owing to the presence of hills and forests, and also to the existence of large *khadir* tracts of the two great rivers, the Yamuna and the Ganga. Among the game animals the tiger (*Panthera tigris*) and leopard (*Panthera pardus*) which were numerous in the past have practically disappeared. The sloth bear (*Selenarctos thibetanus*) inhabits the Siwaliks and the *jangali suwar* or wild pig (*Susserofa cristatus*) is found all over the district and especially in the lowlands of the Ganga and the Yamuna. Deer of many species including the *harin* (*Antelope cervica*), sambur (*Cervus unicolor niger*), spotted deer or *chital* (*Axis axis*) and the barking deer or *kakar* (*Mantiacus muntajak*) are also found in the district. Of the antelopes the Indian black buck has become rare, the nilgai (*Boselaphus tragocamelus*) is found in the river basins and the small forests of the north,

the *gural* or Himalayan chamois (*Nemorhaecatus*) occurs on the Siwalik ridges, and the *chausingha* or four-horned antelope (*Tetracus guadi*) and the *barahsingha* (*Cervus durana*), are occasionally to be met with in the forests. The *khargos* (*Lepus gricoli*) is met with throughout the district.

Among the non-game animals the *hathi* or wild elephant (*Elephas maximus*) are found in herds in the hills almost throughout the year and there is hardly a torrent bed in which their foot-prints may not be seen. Occasionally they descend into the submontane country, doing much damage to rice and other crops. The animals generally seen throughout the district are *newala* (*Herpestes edwardsii*), wild dog (*Cuon dukhuneusis*), fox (*Vulpes bengalensis*), wild cat (*Felis chaqaffinis*), *lakarbaggha* (*Hyaena hyaena*), monkey (*Macaca mulattatraa*), langur (*Presbytisentellus sehstacens*) and *seht* (*Hystrix indica*).

Birds—The birds are of the same species as are found in most of the submontane districts. The resident birds include peafowl, black and grey partridge, sand grouse and jungle-fowl, while the migrants include snipe, quail and all the usual varieties of water-fowl which visit the district in large numbers during the cold weather. The chief species of game birds are *kali* (*Lophura lucomelana*), *bater* (*Coturnix coromandelica*), *lawa* (*Perdica asiatica*), *lalmurgi* (*Gallus gallus*), *kalatitar* (*Francolinus francolinus*), *safed titar* (*Francolinus pondicerianus*), *dhaner* (*Tockus birostris*) and *harial* (*Treris phoenicopto*). Among the other birds which are generally seen throughout the district, are the *mor* (*Pavo cristatus*), *ullu* or owl (*Glaucidium cuculoides*), *koel* or cuckoo (*Endynamys scolopacea*), *cheel* or kite (*Milvus migrans*), *jungli kawwa* or crow (*Corvus macrorhynchos*), *tota* or parrot (*Psittacula eupatria*), *nilkanth* (*Coracias bengalensis*) and *rajgiddh* (*Torgos calvus*).

Reptiles—The majority of the snake species found in the district is non-poisonous except the cobra (*Naja naja* or *Naja tripudians*), the krait (*Bungarus caeruleus*) and the Russell's viper (*Vipera russellii*). The *ajgar* or python (*Python molurus*), which is comparatively harmless, attains an enormous size and is confined to the Siwaliks.

Fish—The large rivers, canal and lakes which hold water throughout the year contain a plentiful supply of fish, the common species being the *mahseer* (*Barbas tor*), *rohu* (*Labeo rohita*), *saul* (*Opheocophalus* sp.), *anwari*, the *chilwa* and the *gunch*.

Game-laws

Till the beginning of the present century, the wild life of the district was greatly imperilled on account of the wide and indiscriminate measures put to use by hunters and poachers. The process of their depletion was so rapid that certain species were brought on the verge of total extinction. In order to protect wild life from further ravages, a number of Acts, such as the Wild

Birds and Animals Protection Act, 1912, Indian Forest Act, 1927, the Wild Birds and Animal Protection U. P. Amendment Act (Act XIII of 1934), U. P. Private Forest Act, 1948, and the Indian Forest Act, 1951 were enforced in this district, as elsewhere in the State.

The game-laws obtaining in the district, are, at present, governed by the Wild Life Protection Act, 1972. This Act imposes a total ban on the shooting of such species as the tiger and the leopard etc., which have become extinct or are close to it. Rules and regulations pertaining to hunting and shooting are periodically published through manuals and other literature of the forest department of the State. Facilities for big game shooting in the district are provided in the forest blocks of Pathri, Kaluwala, Barkala (west), and those for small game at Khara, Barkala, Shakumbri, Khujnawar and Pathri forest blocks of the district.



CHAPTER II

HISTORY

The Saharanpur district of the Meerut Division of the State of Uttar Pradesh lies in the upper doab of the Ganga and the Yamuna, with the two rivers forming respectively its eastern and western boundaries. They are among the rivers which find mention in the *Rigveda*, and the expanse of country reflected in its hymns includes the region lying between them.¹

The discovery of ochre-coloured ware at Ambakheri, Bakarka, Budhi Khera, Gadharona, Ghathera, Hardakheri, Shikarpur and Thataula (Khempur Kalera); Harappan pottery at Ambakheri and Thataula and painted grey ware at Rasulpur and Sarsawa, as a result of the explorations and excavations made at these sites in the early sixties of the present century, lends strong support to the traditional thought that a well-developed society had existed in the remote past in the region now comprising the Saharanpur district. It appears that on entering the heart of the Indian subcontinent, which came to be called Madhyadesa, the Vedic Aryans established their early settlements in different parts of the upper doab, including this district, which, therefore, became the chief stronghold of Vedic culture and Brahmanism.²

In fact, certain places in the district are closely associated with early Brahmanical mythology and are among those held most sacred by the Hindus all over India.³ For example, the town of Kankhal, about 4 km. below Hardwar, is believed to mark the site of the capital of Daksha, whose daughter, Sati, was married to Siva. Daksha was, however, disgusted at the practices of Siva—his going half-naked, smearing himself with ashes (*bhasma*), carrying a skull, and behaving as if he were doped. When Daksha made preparations to perform a sacrifice (*yajna*), he excluded the name of Siva from the list of invitees and, not content with this step, hurled abuses on the absent son-in-law. Sati, who happened to be present on the occasion, through vexation at the treatment meted out to her husband, threw herself direct into the sacrificial fire and immolated. On hearing the news, the enraged Siva and his attendants under the command of Virbhadrā spoiled Daksha's sacrifice and punished the participants.⁴

1 Majumdar, R. C. and Pusalker, A. D. (Ed.): *The History and Culture of the Indian People*, Vol. I—*The Vedic Age*, pp. 242, 244

2 *Ibid.*, pp. 252-253; Rapson, E. J. (Ed.): *The Cambridge History of India*, Vol. I, p. 49

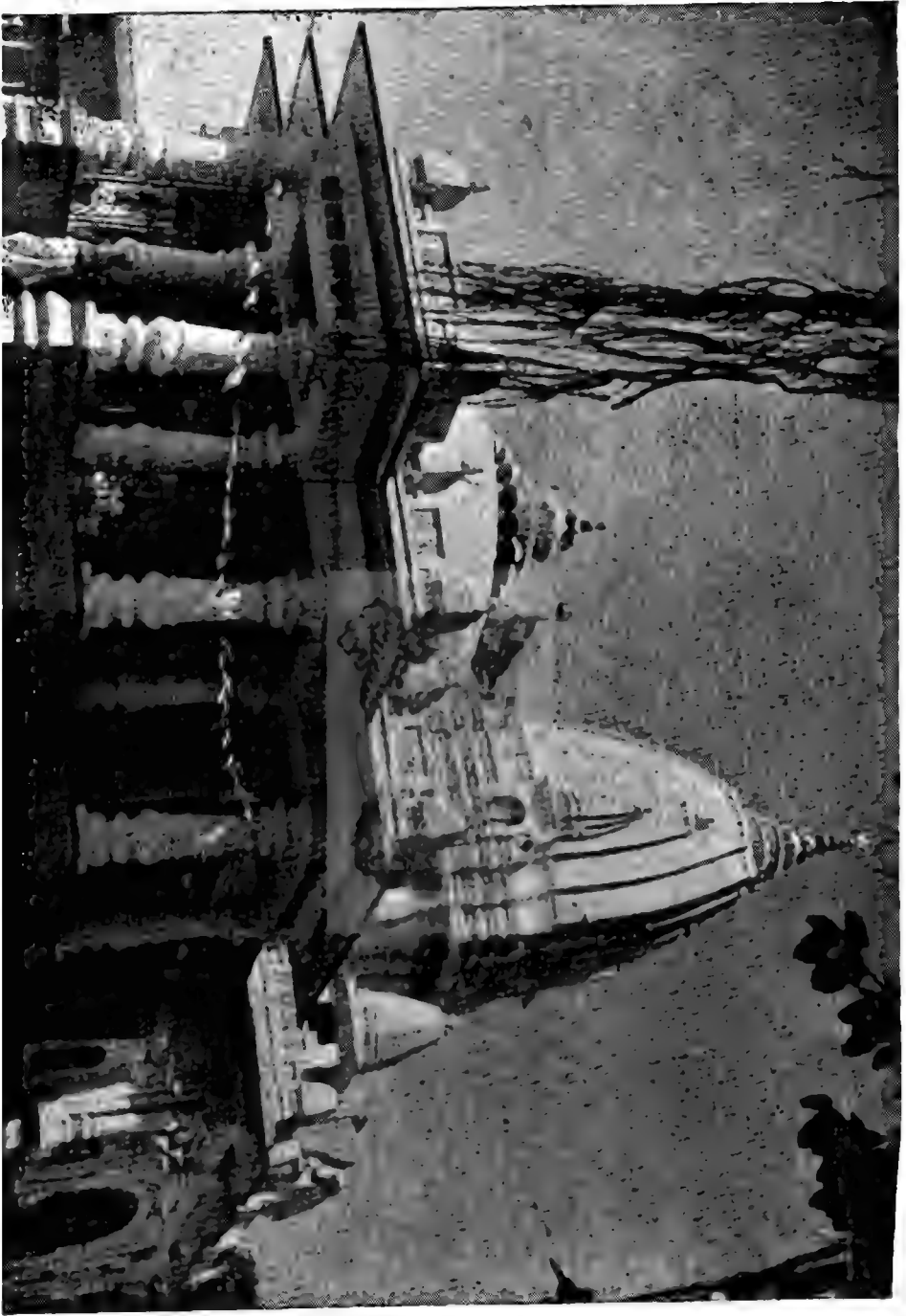
3 Nevill, H. R. : *Saharanpur: A Gazetteer*, (Allahabad, 1909), p. 177

4 *Ibid.*, p. 256; Atkinson, E. T. : *Statistical, Descriptive and Historical Account of the North-Western Provinces of India*, Vol. II, Part I, (Allahabad, 1875), pp. 289-290; Fuhrer, A. : *The Monumental Antiquities and Inscriptions in the North-Western Provinces and Oudh*, (Allahabad, 1891), p. 16

Hardwar is by far the most important holy place in the district. The Puranic legend goes that Sagara, born in the Solar race of Ayodhya, determined on performing a horse sacrifice for becoming a sovereign ruler (*chakravarti*). The horse was loosened, but was carried off. While searching for it, the 60,000 sons of Sagara met the rishi Kapila who reduced them to ashes on account of their ill-conduct. When Sagara came to know of the event, he sent his grandson Anshumana to recover the horse. Anshumana succeeded in assuaging the wrath of the sage, who not only gave him the horse but was kind enough to point out that his grandson (Bhagiratha) would be able to bring down the Ganga 'the river of the gods' upon earth; and through its waters the dead sons of Sagara would be absolved of their sins and raised to heaven.¹ This 'river of gods', the Ganga, is believed to have issued forth from the toe of Vishnu, and, in her descent, to have been borne by Siva on his head.² It is why the place where the mountain chain is pierced by the great gorge through which the holy river debouches on the plains is known both as Haridwar (Hari—Vishnu) and Hardwar (Hara-Siva). Another name of the place is Gangadwara (gate of the Ganga), and still another, Gangavartta, the term *avartta* signifying 'an enclosed place of a circular form, more particularly applied to places of worship'.³ The place is also associated with Bhima and Arjuna, the two of the five Pandava heroes of the *Mahabharata*.⁴ Then, to a little, south of Hardwar is the site of the old town of Mayapur, where there is a large mound about 750 feet square, which is said to mark the site of the fort of the mythical Raja Vena, who is supposed to have been anti-Brahmanical. The place has also yielded old large bricks and some ancient Buddhist and Jain sculptures.⁵ The towns of Deoband⁶ and Nakur⁷ are traditionally associated with the Pandavas, that of Manglaur with Raja Mangal Sen, a contemporary of Vikramaditya⁸, that of Gangoh with Gang, an ancient local raja⁹, and that of Sarsawa with the birth of the celebrated early mediaeval saint Gogapir (Goga Chauhan or Zahir Diwan) whose mother, Bachhal Rani, is said to have resided here, and who is worshipped both by the Hindus and Muslims of northern India.¹⁰

In the course of excavating the Ganga canal, in 1834, Captain Cautley accidentally discovered at village Behat, the remains of an ancient buried

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- 1 Atkinson, *op. cit.*, pp. 284, 288 ; Nevill, *op. cit.*, pp. 252-253; Fuhrer, *op. cit.*, p. 15
 - 2 *Ibid.*, pp. 15-16; Nevill, *op. cit.*, pp. 253-254; Atkinson, *op. cit.*, p. 288
 - 3 *Ibid.*, pp. 284-286; Thornton, E.: *A Gazetteer of the Territories under the Government of the East India Company and the Native States of the Continent of India*, (London, 1854), pp. 140-141; Fuhrer, *op. cit.*, p. 15; Nevill, *op. cit.*, p. 253
 - 4 *Ibid.*, p. 253; Atkinson, *op. cit.*, pp. 288, 289
 - 5 *Ibid.*, pp. 284-286; Fuhrer, *op. cit.*, p. 16; Nevill, *op. cit.*, p. 255
 - 6 *Ibid.*, p. 224
 - 7 *Ibid.*, p. 289
 - 8 *Ibid.*, p. 273
 - 9 *Ibid.*, p. 241
 - 10 *Ibid.*, p. 335



Temple of Daksheshwar, Hardwar

town at a depth of 17 feet below the level of the surrounding country and 25 feet below that of the existing site. The antiquities unearthed included a number of Indo-Scythian coins belonging to the early centuries of the Christian era, and seemed to point to the existence there of a large Buddhist settlement in those times.¹ There are also several ancient mounds or *kheras* in different parts of the district, which probably mark the sites of old habitations, forts or buildings.

In the early sixties of the present century, explorations and excavations were undertaken by the archaeological department of the Government of India at a number of sites in this district, which showed that Ambakheri, Bakarka, Budhi-Khera, Gadharona, Ghathera, Hardakheri, Shikarpur and Thataula (Khempur Kalera) were ochre-coloured ware sites, Bargaon and Pilkhani yielded actual Harappan pottery, and Ambakheri and Thataula also the painted grey ware, as did Rasulpur and Sarsawa.² The ochre-coloured ware is generally associated with the Harappan culture while the painted grey ware with the early Aryan settlers. At Ambakheri, thirteen trenches, each 5 m. square, were laid out, and the site revealed a single culture occupation, yielding the ochre-coloured ware in many hitherto unknown pottery forms, and other antiquities having affinities with those of the Harappan. The finds included several noteworthy types of pottery, both in thick and thin fabrics, a carnelian bead, terracotta objects like a cart-wheel with a central hub, animal figurines including a humped bull and a fragmentary cake with oval depressions, stone saddle-querns with pestles, and the remains of a brick-kiln and a hearth. From a study of the discoveries, it has been surmised that the site is likely to represent a degenerate phase of the Harappan culture, and as such provides an important link in bridging the gap between the Harappan and the painted grey ware cultures.³ At Bargaon, the excavations revealed a metre thick occupational deposit which yielded the Harappan ware alongwith the unslipped ochre-coloured ware, other noteworthy finds being copper rings, chert blades, weights, bull-headed terracotta toy-carts, terracotta and faience bangles and terracotta cakes with finger impressions.⁴ Gadharona yielded, besides some new types in its ochre-coloured ware, barrel shaped beads of banded agate and a terracotta figurine⁵, and at Sarsawa, 16 km. from Saharanpur on the Saharanpur-Ambala road, were discovered, apart from specimens of painted grey ware, the traces of a moat, perhaps part of a fortification system.⁶

Thus the tract covered by the present district of Saharanpur appears to have enjoyed some sort of civilized life since very early times. Not being far from the Meerut region which has revealed, during the course of archaeo-

1 *Ibid.*, pp. 177, 215

2 *Indian Archaeology 1963-64—A Review*, (New Delhi, 1967), pp. 53–57, 92

3 *Ibid.*, p. 56

4 *Ibid.*, pp. 56-57

5 *Ibid.*, p. 53

6 *Ibid.*, p. 92

logical explorations and excavations undertaken at sites like Hastinapur, Rajpur Parsu and Alamgirpur Buzurg, definite traces of the influence of the copper age Indus valley civilization and its later Harappan phase and of the earliest Aryan settlements in this region,¹ parts of the Saharanpur district seem to have been, in all probability, similarly affected, particularly in view of the archaeological discoveries mentioned above.

It appears that the Bharatas, one of the most important Rigvedic tribes were among the earliest Aryan people associated with this region.

According to the Puranic traditions, the earliest known Kshatriya king to hold sway over this region was Sagara of the Solar dynasty of Ayodhya, who was a *chakravarti* (paramount sovereign of the country). Sagara's grandson, Anshumana, and the latter's grandson, Bhagiratha, being also associated with the district.²

About this time, the Paurava king Dushyanta, a descendent of Puru, the son of Yayati of the Lunar race, seems to have established himself at Hastinapur (in Meerut district) and revived the glory of his dynasty.³ His son, Bharata, the great conqueror and emperor, held sway over the territory extending from the river Sarasvati to the Ganga⁴, evidently including this district. He is said to have performed a number of Vedic sacrifices on the banks of the Ganga and the Yamuna⁵, some of them probably at Hardwar and other places in this district as well.

A few generations after Hastin, the fifth in descent from Bharata, was born Samvarana⁶ whose son and successor, Kuru, raised the Paurava realm of Hastinapur to great eminence and extended his domains as far as Prayag, covering about the entire Ganga-Yamuna doab. The territory, particularly the upper doab including this district, came to be called, after him the Kuru country, its cultivated portion being named as Kurukshetra and the uncultivated as Kurujangala. His successors also came to be known henceforth as the Kurus, which term is sometimes applied to the inhabitants of the region as well.⁷

The family fortunes appear to have gradually declined after the death of Kuru, only to be revived by Pratipa⁸ (tenth or fifteenth in descent from Kuru). His son and successor was Shantanu whose grandsons, Pandu and Dhritarashtra, were respectively the fathers of the celebrated Pandavas and

1 *Ancient India* (Bulletin of the A. S. I.), Nos 10-11 pp. 1-14 150-151; *Indian Archaeology* 1958-59—*A Review*, pp. 50-55, 75

2 Atkinson. *op. cit.* pp. 284, 288; Nevill, *op. cit.*, pp. 252-253

3 Majumdar and Pusalker, *op. cit.*, Vol. I. p. 296

4 Rapson, *op. cit.*, Vol. I, p. 274

5 *Ibid.*, Majumdar and Pusalker, *op. cit.*, p. 296

6 *Ibid.*, pp. 294-295, 307

7 *Ibid.*, pp. 295, 310

8 *Ibid.*, p. 295

Kauravas of the *Mahabharata* fame.¹ Hardwar is said to have been one of the holy places which Arjuna, the third of the Pandava brothers, visited during his voluntary exile, and where he was espoused by Ulupi, the daughter of the Naga king Vasuki.² Bhima, the second of the Pandavas, is also associated with Hardwar where a hollow in the rock is pointed out as caused by a kick from his horse and hence called Bhimaghoda,³ and the foundation of the town of Nakur is traditionally attributed to the fourth brother, Nakula.⁴

The throne of Hastinapur was the chief bone of contention between the Kauravas and the Pandavas, and the fate of the kingdom was consequently decided in the famous Mahabharata War, generally believed to have taken place some time between 1400 B.C. and 1000 B.C.⁵ Almost all the princes of northern India participated in this war on one side or the other, the entire host of the Kauravas being annihilated and the Pandavas coming out victorious. Yudhishtira, now the unquestioned king of the Kurus, ascended the throne of Hastinapur,⁶ and his kingdom included this district. The war marked the close of the Dwapara Yuga and the commencement of the Kali Yuga, even in the Puranic accounts 'the past' ending and 'the future' beginning with this event.⁷

Towards the end of his reign, Yudhishtira abdicated the throne in favour of Parikshit, the grandson of Arjuna, posthumously born, and the five Pandava brothers alongwith their common wife, Draupadi, repaired to the Himalayas⁸ probably passing through this district via Hardwar. Parikshit was a capable and noble-minded monarch, and his prosperous and vast kingdom included roughly what are now the Union Territory of Delhi, Haryana, parts of the Punjab and the greater part of the Ganga-Yamuna doab,⁹ which obviously covered the Saharanpur area. But, in his later years, under Takshaka the Nagas suddenly rose to power and invaded the kingdom of Hastinapur, and in an attempt to counter their onslaught Parikshit lost his life.¹⁰

Parikshit was succeeded by his son, Janamejaya, who soon became a powerful monarch and avenged his father's death by routing the Nagas.¹¹

1 *Ibid.*, p. 296

2 Atkinson, *op. cit.*, p. 288

3 *Ibid.*, p. 289 ; Nevill, *op. cit.*, p. 253

4 *Ibid.*, p. 289

5 Rapson, *op. cit.* pp. 246, 273, 274 ; Majumdar and Pusalker, *op. cit.*, Vol. I, p. 268

6 *Ibid.*, pp. 300-303

7 *Ibid.*, pp. 303-304

8 *Ibid.*, p. 303

9 *Ibid.*, p. 319

10 *Ibid.*, pp. 319, 320

11 *Ibid.*, p. 320

The Kuru kings of Hastinapur continued to hold sway over this region till the time of Nichakshu, the fourth in descent from Janamejaya, when their capital was destroyed through flood and famine, and the Kurus migrated *en masse* to Kaushambi (Kosam near Allahabad) in Vatsabhumī.¹ They had been pre-eminent among the Kshatriya kings of the later Vedic age, scrupulously performed Vedic sacrifices in accordance with the texts, patronised learned Brahmanas, and made their territory the stronghold of the Vedic religion and culture.²

After the emigration of the main branch, the district appears to have come under the sway of a junior branch, the Abhipratarnas, which had been established at Indraprastha (modern Delhi) by Kakshasena, younger brother of Janamejaya.³ These later Kurus appear to have continued to dominate this region for several centuries, but to have gradually given up the monarchical form and constituted themselves into a republican federation.⁴ Possibly, the centre of the realm was again shifted to Hastinapur which figures as the capital of the Kuru-janapada, one of the Shodasa Mahajanapadas (sixteen premier states) that are stated to be flourishing in the time of Mahavira and the Buddha (6th century B.C.).⁵

About the middle of the 4th century B.C., the Kurus of this region were uprooted by the Nanda king, probably Mahapadma Nanda, of Magadha, who has been described in the *Puranas* as the exterminator of the Kshatriya race, and the district became part of the Nanda empire.⁶ A quarter of a century later, about 324 B.C., Chandragupta Maurya ousted the Nandas and founded the Maurya dynasty, his vast empire including almost the whole of India.⁷ His grandson, the great emperor Asoka (*circa* 273-236 B.C.), certainly held sway over what is now the Saharanpur district, since his famous major edicts have been found inscribed on a rock at Kalsi in Dehra Dun district to the north,⁸ and one of his celebrated pillars bearing his edicts is said to have originally stood at village Topra (or Tobra) close to the western border of the Saharanpur district, across the Yamuna.⁹ This, the so-called golden pillar (Minar-i-zarin or Lat-i-zarin), was later, in the 14th century, carried off to Delhi by sultan Firuz Shah Tughluq¹⁰ Probably to the same period (Maurya times, about the third century B.C.) may be assigned the buried town discovered in 1834 at Behat.¹¹ As the pillar edicts of Asoka, inscribed on the obelisk mentioned above, allude to the Brahmanas, Sramanas (Buddhists), Ajivikas and Nirgranthas (Jains), all these religious communities appear to have been flourishing in

1 *Ibid.*, p. 321; Rapson, *op. cit.*, p. 275

2 *Ibid.*, pp. 104, 106; Majumdar and Pusalker, *op. cit.* Vol. I, pp. 252, 253, 387

3 *Ibid.*, pp. 44, 46, 320

4 *Ibid.*, Vol. II—*The Age of Imperial Unity*, p. 11

5 *Ibid.*, p. 1; Jain, J. P.: *Hastinapur*, p. 8, footnote 24

6 Majumdar and Pusalker, *op. cit.*, Vol. II, pp. 32-33

7 *Ibid.*, pp. 58, 61

8 Nevill, *op. cit.*, p. 177

9 *Ibid.*

10 *Ibid.*, Atkinson, *op. cit.*, p. 243

11 Nevill, *op. cit.*, pp. 177, 215

these parts in those times.¹ This record was caused to be inscribed 27 years after Asoka's coronation, that is, the *circa* 242 B.C.²

About 187 B. C., Pushyamitra Sunga, the general of the last Maurya king, assassinated his master and established his own dynasty, and ruled over the Magadha empire for 36 years.³ It appears that soon after Pushyamitra Sunga's accession the Indo-Greeks under Demetrius invaded northern India, probably passing through this district.⁴ Again, about the middle of that century, another Indo-Greek king, Menander, made a similar invasion, conquered the western districts of Uttar Pradesh, in all probability including the Saharanpur district, and annexed them to his empire.⁵

The domination of the Indo-Greeks over these parts does not appear to have lasted very long, as during the first half of the first century B. C., a powerful dynasty of Saka Satraps was established at Mathura, whose influence might have extended as far as this district⁶. About the same time, another power, that of the indigenous militant tribe of the Yaudheyas, was rising in eastern Punjab, which seems to have held sway over this district from about the last quarter of the first century B. C., to that of the first century A. D., when they had to submit to the Kushanas⁷ under Kanishka (78—120 A. D.)⁸. The district remained part of the Kushana empire till about the middle of the 3rd century when the power of the Kushanas rapidly declined and the Yaudheyas once more became independent. It has been suggested that they were especially responsible for extirpating the Kushana rule from eastern Punjab, and consequently from the Saharanpur region.⁹ The Yaudheyas were finally subdued by the Guptas, probably under Samudragupta, about the middle of the fourth century A. D.¹⁰

Since then for more than a century and a half, the district formed part of the Gupta empire and lay in its Antardesh *vishaya* (province) which comprised the entire Ganga-Yamuna doab, from Hardwar to Prayag.¹¹ It is said that it was during the reign of Samudragupta's son and successor, Chandragupta II Vikramaditya (379—413 A. D.), that one Mangal Sen, probably a local chieftain, founded the town and fort of Manglaur in this district.¹² Probably, Mayapur (an old site near Hardwar), too, rose to

1 Sircar, D. C. : *Inscriptions of Asoka*, pp. 73—77

2 *Ibid.*, p. 77 ; Majumdar and Pusalker, *op. cit.*, Vol. II, pp. 88-89

3 *Ibid.*, pp. 90, 95—97

4 *Ibid.*, pp. 96-97, 106-107

5 *Ibid.*, pp. 112—115

6 Rapson, *op. cit.*, pp. 519-520

7 Majumdar and Pusalker, *op. cit.*, Vol. II, pp. 165-166

8 *Ibid.*, pp. 141—144

9 *Ibid.*, pp. 151-152, 166, 168

10 *Ibid.*, p. 166, 170

11 *Ibid.*, p. 170

12 Neill, *op. cit.*, p. 178

importance about this period.¹ In 466 A. D., during the reign of Skandagupta, the last great Gupta emperor, the *vishaya-pati* (provincial governor) of the Antarvedi *vishaya* was one Sharvanaga, a Naga chief.²

It was also towards the close of the reign of this emperor that the barbarous hordes of the white Hunas invaded India and began making terrible inroads into the territories of the Guptas. The valiant Skandagupta for once repulsed them, but his weak successors could not hold long, and the power and prestige of the dynasty rapidly declined.³ For a time the Hunas appear to have become masters of this district, but by the early thirties of the 6th century, they were finally routed and driven out of the greater part of northern India,⁴ although the Gupta empire itself was also broken up.⁵ The district appears to have passed under the domination of the Maukhari kings of Kannauj, who were originally feudatories of the Gupta emperors, but in the latter half of the 6th century had become independent and fairly powerful.⁶

About this time, another dynasty, that of the Vardhanas, was established at Thaneswar (in east Punjab). It entered into marriage alliances with the later Guptas and the Maukharis and soon gained ascendancy⁷; the rule of these rulers of Thaneswar may have extended as far as this district by the end of the 6th century. At least, this region definitely formed part of the empire of Harsha Vardhana (606—647), under whom the two kingdoms of Thaneswar and Kannauj were united, with the latter city as the capital.⁸

It was during this reign that the celebrated Chinese pilgrim, Hiuen Tsang (629—645 A. D.), visited India and came to this district as well.⁹ On leaving Thaneswar in 635 A. D., the pilgrim travelled more than 400 *li* north-east to Srughna,¹⁰ identified with village Sugh, about 5 km. east of Jagadhari in the Ambala district¹¹ which adjoins the Saharanpur district on the west. Probably a part of this district then lay in this country of Srughna¹² where there were 100 Deva temples and the inhabitants though honest were non-Buddhists notwithstanding the fact that there were also five Buddhist monasteries with 1000 monks in them.¹³ From Srughna, he proceeded to

1 *Ibid.*

2 Majumdar and Pusalker, *op. cit.*, Vol. II, p. 170

3 Nevill, *op. cit.*, p. 178; Majumdar and Pusalker, *op. cit.*, Vol. III—*The Classical Age* pp. 26—28, 29—36

4 *Ibid.*, pp. 35—41

5 *Ibid.*, pp. 42—44

6 *Ibid.*, pp. 67—71

7 *Ibid.*, pp. 96—99

8 *Ibid.*, pp. 99—102, 113

9 Nevill, *op. cit.*, pp. 178, 253, 255; Atkinson, *op. cit.*, p. 285

10 Watters, T.: *On Yuan Chwang's Travels in India*, Vol. I, p. 317; Vol. II, pp. 335, 337

11 Cunningham, A.: *The Ancient Geography of India*, pp. 290—292

12 Watters, *op. cit.*, Vol. II, pp. 337—338

13 *Ibid.*, Vol. I, p. 318

Matipur (Bijnor district)¹, and from there, travelling north-east, he came to the city of Mo-yu-lo (or Mayura) which stood on the east side of the Ganga and was more than 20 li (about 5.5 km.) in circuit. "It had a large population and streams of clear water : it produced bell-metal (*tu-shih*), rock crystals and articles of jewellery. Near the city and close to the Ganges was a large Deva temple of many miracles, and in its enclosure was a tank the banks of which were faced with stone slabs, the tank being fed by an artificial passage from the Ganges. This was called the Ganga-Gate and it was a place for making religious merit and extinguishing guilt : there were constantly many thousands of people from distant regions assembled here for bathing. Pious kings erected Punyasalas in the district for the free distribution of dainty food and medical requisites to the kinless and friendless."² The Ganga-Gate of this passage is said to be the Gangadwar, the modern Hardwar, and the city of Mayura has been identified with the present ruined site of Mayapur, at the head of the Ganges canal, close to Hardwar.³ About the holy river the pilgrim further says that "its waters have a pleasant sweet taste and a fine sand comes down with the current. In the popular literature the river is called *Fu-shui* or 'Happiness-water' that is, the water (or river) of religious merit. Accumulated sins are effaced by a bath in the water of the river : those who drown themselves in it are reborn in heaven with happiness : if the bones of one dead be consigned to the river that one does not go to a bad place : by raising waves and fretting the stream (that is, by splashing and driving the water back) the lost soul is saved."⁴ Thus, Hardwar and the Ganga were considered as holy in the 7th century as at present. The well, called the Brahma-kund, attached to a small temple near the Gangadwar temple at Hardwar, is most probably the same as was noticed by Hiuen Tsang, but the great temple of his days has long ago disappeared.⁵

For about half a century after the death of Harsha, anarchy and confusion reigned in northern India⁶ till order was restored by Yashovarman, king of Kannauj, about the close of the 7th century.⁷ During the 8th century, the district appears to have been under the rule of that king and his successors, the Ayudha rulers.⁸ They were, towards the close of the century, ousted by the Gurjara Pratiharas who also made Kannauj, the capital of their growing empire,⁹ of which the district continued to form part during the

1 *Ibid.*, p. 322

2 *Ibid.*, p. 328

3 *Ibid.*, p. 329; Vol. II, p. 338; Cunningham, *op. cit.*, pp. 295—298

4 Watters, *op. cit.*, Vol. I, p. 319

5 Atkinson, *op. cit.*, p. 286

6 Majumdar and Pusalker, *op. cit.*, Vol. III, p. 124

7 *Ibid.*, pp. 128—131

8 *Ibid.*

9 *Ibid.*, Vol. IV—*The Age of Imperial Kanauj*, p. 25

next two centuries.¹ About the middle of the 10th century, however, the Gurjara Pratihara empire began to disintegrate, and was gradually reduced to the territory round about Kannauj², its final death-knell was sounded by the invasions of Mahmud of Ghazni in the first quarter of the 11th century.³

In the meantime, a dynasty of Tomara Rajputs had established itself at Delhi. The Tomaras soon submitted to the Gurjara Pratiharas, became their feudatories and were probably the immediate rulers of the Saharanpur region.⁴

The early Muslim chroniclers seldom mention this district, for though it appears that the ancient highway connecting the Punjab with the east passed through Saharanpur and Deoband to Meerut, it seems to be the case that whoever held Delhi held the doab as far as the Siwalik hills.⁵ The first reference to the highway in question, though even this is doubtful, occurs in the writings of Alberuni who lived between 970 and 1039 A.D.⁶ In his itinerary he mentions a place called Shirsharaha (Sharasharaha or Sirsawah), 50 *farsakh* north-west from Kannauj, on way to Thaneswar.⁷ The place has been identified with Sarsawa in this district, which was certainly a place of importance in old days as commanding the passage of the Yamuna, and where in later times both Timur and Babur halted.⁸ A second mention of Sarsawa is made in the account of the campaign of Mahmud of Ghazni against the Hindu princes about 1018 A.D., though this again is open to doubt. If the invader, as is stated, followed the route along the foot of the hills and then crossed into the doab, going from Baran (Bulandshahr) to Mathura and thence to Kannauj, he would have passed Sarsawa first, whereas the chronicles take him to Sharwa (identified by Cunningham with Sarsawa) after his reduction of Asni.⁹ "The sultan", writes the author of the *Tarikh-i-Yamini*, when he heard of the flight of Chandel was sorely afflicted "turned his horse's head towards Chand Rai, one of the greatest men in Hind, who resided in the fort of Sharwa, and in his pride and self-sufficiency thought the following verse applicable to himself. 'I sneeze with expanded nostrils, and hold the Pleiades in my hand even while sitting'. Between him and Puru Jaipal (probably the raja of Kanauj) there had been constant fights."¹⁰ They at last consented to peace, Chand Rai giving in marriage his daughter to Puru Jaipal's son Bhim Pal. The difficulty may perhaps be accounted for by the

1 *Ibid.*, pp. 32, 35, 36, 39

2 *Ibid.*, 38

3 *Ibid.*, pp. 38, 39

4 *Ibid.*, pp. 110-111

5 Nevill, *op. cit.*, p. 178

6 *Ibid.*, p. 179

7 *Ibid.*; Sachau, E. C.: *Alberuni's India*, Vol. I, p. 205; Elliot, H. M. and Dowson, J.: *The History of India as told by its own Historians*, Vol. I, p. 61

8 *Ibid.*, p. 61, footnote 7; Nevill, *op. cit.*, p. 179

9 *Ibid.*; Cunningham, A.: *Archaeological Survey of India*, Vol. II, p. 230; Elliot and Dowson, *op. cit.*, Vol. II, pp. 47, 459

10 *Ibid.*, p. 47

statement that Chand Rai was frightened by Mahmud's conquests and therefore retired to the hills, Sarsawa possibly being not his capital but one of his forts. This place was taken; but Chand Rai escaped through the forest to the hills with the Muslims in hot pursuit, and, on the 6th of January 1019, a battle was fought in which the Hindus were utterly routed and an enormous amount of plunder and innumerable slaves fell into Mahmud's hands.¹ The booty amounted in gold, silver, and precious stones to 30,00,000 *dirhams*, and "the number of prisoners may be conceived from the fact that each was sold for two to ten *dirhams*". It is said that the fifth share due to the Saiyids was 1,50,000 slaves.² However this may be, there can be no doubt that a greater part of the northern portion of this district fell out of cultivation during this period, and that it was not for several centuries afterwards that much improvemet took place.³ It would also appear that at that time Chand Rai of Sarsawa had been the immediate ruler of the district, and after his destruction at the hands of Mahmud of Ghazni, the Tomaras of Delhi seem to have reasserted their authority. By the middle of the 11th century, they had become independent and fairly powerful, and continued to enjoy that position till about the middle of the next century when they were superseded by the Chahamanas (Chauhans) at Delhi.⁴ The Chahamanas kings of Sapadlaksha were also known as Sekhmbherias or deriving their nomenclature from the shrine of goddess 'Sekhambheri', located on the hills in the north-west of paragana Muzaffarabad in the Saharanpur district.

The routes said to have been taken by the legendary Muslim hero, Saiyid Salar Masaud Ghazi about 1030 A.D., and a little later by Ahmad Nialtigin, another Ghaznavid general, did not touch Saharanpur.⁵ Local tradition, however, speaks of the capture of the towns of Deoband and Rampur in this district by the former, but the story seems altogether improbable.⁶

The town of Bhagwanpur, in tahsil Roorkee, is said to have been founded by a colony of Brahmanas and Rajputs in 1061,⁷ and a later inscription, dated *Samvat* 1220 (A.D. 1163) and found inscribed on the Asokan pillar discovered in this region, records the victories of the Chauhan prince Vishaladeva or Vighraraja IV, a predecessor of the famous Prithviraja.⁸ Thus from about the middle to the early nineties of the 12th century, the Chauhan rulers of Delhi and Ajmer seem to have held the district under their domina-

1 *Ibid.*, pp. 47-50; Nevill, *op. cit.*, p. 179; Atkinson, *op. cit.*, pp. 245-246

2 *Ibid.*, p. 246

3 *Ibid.*

4 Majumdar and Pusalker, *op. cit.*, Vol. IV, p. 111

5 Nevill, *op. cit.*, p. 179

6 *Ibid.*, pp. 224, 302; Atkinson, *op. cit.*, pp. 265, 316

7 Nevill, *op. cit.*, p. 216

8 Fuhrer, *op. cit.*, p. 17; Sharma, D. : *Early Chauhan Dynasties*, (Delhi. 1959), pp. 61-62

tion, which ended with the defeat of Prithviraja, their last celebrated king, at the second battle of Taraori, in 1192 A.D., at the hands of Shihab-ud-din Muhammad Ghuri, the founder of Muslim rule in India.¹

This victory gave the Ghuri sultan northern India almost to the gates of Delhi, and he appointed as viceroy of his new conquests Qutb-ud-din Aibak, his slave and most trustworthy general.² The latter marched several times into the doab, capturing places like Koil (Aligarh) and Meerut, but does not appear to have come to the Saharanpur district.³ It is said that in 1217, Iltutmish, who had ascended the throne of Delhi in 1211, subjugated all the territory up to the Siwalik hills, presumably for the first time, and captured Mandawar in the Bijnor district.⁴

In 1263, Nasir-ud-din Mahmud, after a campaign in the hills of the Punjab, crossed the Yamuna at Rajghat and traversed the north of the district, making the passage of the Ganga at Hardwar, from where he turned southwards to Budaun.⁵ This sultan was succeeded by Balban (1266—1288) who is said to have built the mosque of Shah Vilayat in the town of Manglaur of tahsil Roorkee, in 683 A.H. (A.D. 1285).⁶

In 1290 A. D., the Slave dynasty was supplanted at Delhi by the Khalji, and it was during the reign of Ala-ud-din Khalji (1296—1316 A. D.), the most important ruler of this dynasty,⁷ that the first incursion of the Mongols into these parts took place, in 1305 A. D., under the command of Ali Beg Gurgan, a descendant of the famous Chingiz Khan⁸ and the active co-operation of Tartaq, another Mongol leader. With a force estimated at 40,000 horse, the invaders swept through the Punjab, crossed the Yamuna at Rajghat, and then passed along the foot of the hills, through the Saharanpur and Bijnor districts, to Amroha (in the Moradabad district), plundering, slaying, ravishing and burning as their hordes advanced. On hearing the news the sultan promptly sent his troops which intercepted and utterly defeated the invaders near Amroha⁹ on 31st December, 1305. A year after, the Mongols under Kubak and Iqbalmand invaded again, in order to avenge Ali Beg Gurgan, and plundered the northern doab, but the Sultan's forces arrived in time to hold the fords of the Yamuna and completely annihilate the Mongols on their return.¹⁰ These events must have retarded the development of district, which had already commenced, but the overthrow of the invaders re-established security, and the rapid spread of agriculture in these

1 Haig, Sir Wolsley (Ed.) : *The Cambridge History of India*, Vol. III, pp. 40-41

2 *Ibid.*, p. 41

3 *Ibid.*, pp. 42—44; Nevill, *op. cit.*, p. 179

4 *Ibid.*, p. 180; Haig, *op. cit.*, pp. 51, 52, 53; Elliot and Dowson, *op. cit.*, Vol. II, p. 241

5 *Ibid.*, p. 353; Nevill, *op. cit.*, p. 180

6 *Ibid.*, p. 273; Fuhrer, *op. cit.*, p. 17

7 Haig, *op. cit.*, pp. 98—119

8 Majumdar, R. C. : *The History and Culture of Indian People—The Delhi Sultanate*, Vol. VI, (Bombay, 1960), p. 29; Lal, K.S. : *History of the Khaljis*, p. 144

9 Majumdar, R. C., *op. cit.*, Vol. VI, p. 29; Nevill, *op. cit.*, 180; Elliot and Dowson, *op. cit.*, Vol. III, p. 198

10 *Ibid.*, pp. 198-199; Haig, *op. cit.*, pp. 111-112; Nevill, *op. cit.*, p. 180

parts is expressly mentioned.¹ Under this sultan, Ala-ud-din Khalji, a uniform system of revenue administration was applied to the districts of the upper doab, which were included in the *khalsa* (crown lands) reserved for the maintenance of the royal army.²

The Khalji dynasty came to an end in 1320 A. D., and that of the Tughluqs began. It is said that it was during the reign of Muhammad bin Tughluq (1325—1351 A. D.), the second sultan of this dynasty, that the town of Saharanpur was founded, apparently at the orders of the sultan himself who named it after Shah Haran Chishti, a celebrated *pir* (Muslim saint), whose shrine still attracts a considerable assemblage of the devout.³ Development of the district was again checked, although the progress of colonisation, which had been going on for some years, may have received some impetus from the invasion of Mongols, early in 1328, under Tarmashirin Khan, the brother of Kabak Khan, king of Khorasan. His was the largest expedition yet led into India. Having pillaged all Punjab, his troops turned into the doab, following the old route through this district, and proceeded to the confines of Budaun after an unsuccessful siege of Meerut. If the court historians are to be believed, he was defeated and driven back; but it is more probable that he was bribed to withdraw, the more so as both Muhammad bin Tughluq and his successor, Firuz Shah Tughluq (1351—1388 A. D.), did their utmost to conciliate the Mongols of whom they were terribly afraid.⁴

In order, however, to protect the region from future attacks of the type, the imperial posts were pushed northwards and established all along the Yamuna with good effect, since none of the many inroads that subsequently occurred seems to have extended into the doab.⁵ It was in one of his progresses for the inspection of these garrisoned posts through this district that Firuz Shah Tughluq noticed the Asokan pillar near Khizrabad and ordered its removal to Delhi.⁶ In 1379, the sultan passed through Ambala and Shahabad to the hills of Saharanpur, and after receiving submission of, and tribute from, the raja of Sirmur and other hill chiefs, returned to his capital. A few years later (in 1384 or 1387), he again visited the Siwalik hills and spent two months in hunting the rhinoceros (*kark*) and the elk (*gozan*) in the jungles of the Dun. Shortly afterwards, his son, Muhammad, rebelled, and on being driven from Delhi, fled northwards to Saharanpur and the hills, where he remained till the death of his father, the sultan.⁷

1 *Ibid.*

2 Rizvi, S. A. A. : *Khalji Kaleem Bharat* (trans. of extract from Ziauddin Barani's *Tarikh-i-Firuzshahi*), p. 90

3 Nevill, *op. cit.*, pp. 180, 320; Atkinson, *op. cit.*, p. 246

4 *Ibid.*, Elliot and Dowson, *op. cit.*, Vol. V, p. 485; Haig, *op. cit.*, p. 143; Nevill, *op. cit.*, pp. 180-181; Agha Mehdi Husain : *Tughluq Dynasty*, p. 124

5 *Ibid.*, p. 181; Atkinson, *op. cit.*, p. 246

6 *Ibid.*, pp. 243—245; Fuhrer, *op. cit.*, pp. 16-17; Elliot and Dowson, *op. cit.*, Vol. III, p. 350; Nevill, *op. cit.*, pp. 177—181

7 *Ibid.*, p. 181; Atkinson, *op. cit.*, p. 246; Elliot and Dowson, *op. cit.*, Vol. IV, pp. 14, 16, 17, 19

Some ten years later, the district was again overrun by the invading hordes of Timur, the most powerful of Central Asian monarchs of his time, who himself has given an account of the events that took place during this expedition in his own memoirs, *Malfuzat i-Timuri*.¹ After the defeat of Mahmud Tughluq, sultan of Delhi, and the capture of Meerut and Delhi, he sent Jahan Shah, one of his generals, to march up to the left bank of the Yamuna and ravage the country, while he in person took the bulk of his forces to the Ganga, and from there into the Bijnor district, crossing the river at Tughlaqpur in the Muzaffarnagar district, near the Balawali ferry. He then won three victories in a single day, on the last occasion defeating on 12th January, 1399 a large force which had collected below the Chandi hills, opposite Hardwar.² He had heard that the *gabrs*, as he calls all that were not followers of Islam, had assembled near Hardwar, and therefore followed them and ordered his men to charge. "Spurring their horses, shouting their war-cry, and brandishing their swords, they fell upon the forces of the enemy like hungry lions upon a flock of sheep." His opponents broke and fled, and an immense booty was obtained by his men.³ It is said that Timur had only one hundred men with him as a personal guard, and was attacked by Malik Shaikha with a large force. When about a bow-shot remained between the two parties, Timur asked a soldier in advance who those approaching, as if to attack, were. He was told that they belonged to the party of Shaikh Kukar, one of Timur's officers, and on this Timur turned to retire. But, Malik Shaikha's men rushed on Timur's party and would have annihilated it had not their own leader been slain in the first onset and his troops dispersed.⁴ A small party of the enemy, with the wives and children of those who had taken part in the first fight, took refuge at Kupila (Hardwar), about two kos off. When Timur heard of this, he marched to that place, and, joined by Prince Pir Muhammad Jahangir, attacked the fugitives. After a slight resistance the enemy took to flight, but many were slain, and the women and children, "the property and goods, gold, money, grain, camels, horses, cows and buffaloes," fell as spoil to the soldiers.⁵ Resting for the night, he cleared the hills of the fugitives, spending some days there, plundering and destroying everything that came in his way, and then crossed the river, encamping about 8 km. below Hardwar.⁶ He then determined to return, and had actually proceeded two marches southwards, when he retraced his steps on hearing that an opposing force had assembled in strength in the Siwaliks. At this juncture he was joined by Jahan Shah, and appears to have marched to Hardwar, where he forced the defile against

1 *Ibid.*, Vol. III, pp. 451—465, 507—517; Haig, *op. cit.*, pp. 195—199; Atkinson, *op. cit.*, pp. 246-247; Nevill, *op. cit.*, p. 181

2 *Ibid.*, Haig, W. : *The Cambridge History of India*, Vol. III, p. 199

3 Atkinson, *op. cit.*, p. 247

4 *Ibid.*

5 *Ibid.*

6 *Ibid.*; Nevill, *op. cit.*, p. 181

the opposition offered by Bahruz, the chieftain of the Dun.¹ He camped that day at Hardwar and then went to Babrah, a dependency of Bakri well known as the country of Miyapur (Mayapur), and halted the next day at Shikk Sar, a distance of four kos, and the next day went to Kandar on the banks of the Yamuna. Where Timur gives (in his memoirs) the name Sar, his chronicler (Sharf-ud-din Yazdi in the *Zafarnama*) gives the name Sarsawa, and the position and the marches clearly corroborate the identification of Sar with the modern Sarsawa.² The town of Malhipur was another of the places in the district, visited by Timur's army.³ After leaving Kandar, Timur passed out of the district into the Punjab.⁴

Timur left the country in a state of utter confusion, and though Mahmud Tughluq still held the throne of Delhi, he had no power or influence, and the land was divided among various nobles till Khizr Khan, the founder of the Saiyid dynasty, occupied the capital in 1414 A. D.⁵ The new sultan bestowed the *iqta* (fief) and Shikk of Saharanpur on one Saiyid Salim, the chief among the Saiyids, and it was probably about this time that the Barha Saiyids settled down in the adjacent district of Muzaffarnagar, profiting by favour shown them by a Saiyid governor, that is Saiyid Salim.⁶ This man in time acquired a large province, extending from Sirhind to Amroha, and held charge at least till 1430. After his death, his property devolved on his sons, Saiyid Khan and Shuja-ul-Mulk, who rebelled and were imprisoned, though their dependent, Pulad, maintained an obstinate resistance in Sirhind. The Saiyids appear to have recovered their estates, since they were again in favour under the third Saiyid sultan, Muhammad bin Farid, a grandson of Khizr Khan.⁷ In 1451, the Saiyid dynasty was supplanted by the Lodi, and this region passed into the hands of the Lodi sultans of Delhi, who retained it intact to the end.⁸

During the reign of Bahlul Lodi (1451—1489), a Muslim colony was founded at Behat (pargana Faizabad, tahsil Saharanpur) by Shah Abdullah, whose ancestor was the famous saint Baha-ud-din Zakaria of Multan. Shah Abdullah received from the sultan a number of villages in the neighbourhood as a rent-free grant, ostensibly for charitable purposes, and his descendants came to be known as the Pirzadas.⁹ The town of Sultanpur (in tahsil Nakur) is also said to have been founded by this sultan, and probably a mosque and a fort the ruins of which lie to the south-east of the main site were built by him.¹⁰

1 *Ibid.*

2 *Ibid.*, pp. 181-182; Atkinson, *op. cit.*, p. 247

3 *Ibid.*, p. 299

4 Nevill, *op. cit.*, p. 182

5 Haig, *op. cit.*, pp. 200—204; Nevill, *op. cit.*, p. 182

6 *Ibid.*; Elliot and Dowson, *op. cit.*, Vol. IV, pp. 46—68; Atkinson, *op. cit.*, pp. 247-248

7 Nevill, *op. cit.*, p. 182

8 Haig, *op. cit.*, pp. 226-227, 228; Nevill, *op. cit.*, p. 182

9 *Ibid.*, p. 215

10 *Ibid.*, p. 341

His son and successor, Sikandar Lodi built in 916 A.H. (A. D. 1511) a mosque at Ambahta (pargana and tahsil Nakur) and another, the Jami Masjid, at Deoband.¹

During his expedition into India, the Mughal emperor Babur took the old route by way of Ambala and Sirhind, and on reaching the Yamuna he crossed the river to visit Sirsawah (Sarsawa).² At that time, the place possessed an important and strong fort, 1,000 feet square, built of brick and with a fosse or ditch, 120 feet broad, all round.³ The country was then in a flourishing condition, and Babur bestowed the town on Tardi Beg Kakshal, who was delighted with its aspect.⁴ From there Babur's army marched two stages southwards, and a skirmish took place near Titron (pargana Gangoh, tahsil Nakur) between the Mughals and an advance guard of the army of Ibrahim Lodi, the last Lodi sultan of Delhi.⁵ The river was recrossed, and shortly afterwards, on April 18, 1526 A. D., the decisive battle of Panipat was fought, as a result of which the Lodis were overthrown and the country was delivered into the hands of Babur who founded the Mughal dynasty.⁶ The town of Lakhnauta (pargana Gangoh, tahsil Nakur) is said to have been founded by a colony of the Turkmans who came to India in the train of Babur, some of the neighbouring villages also tracing their origin to the expedition.⁷

In the following year, 1527 A. D. (933 A.H.), the famous saint Shah Abdul Quddus, a disciple of Shaikh Muhammad, a descendant of Abu Hanifah and son of Shaikh Arif founded the Sarai, or new town of Gangoh and died there in 1536/37 A.D. His mission was followed by the conversion of many of the Rajput, Gujar and Taga inhabitants of the district and it materially strengthened the Muslim element in the population.⁸ Saharanpur was then under the governor of Delhi, and the district remained in the possession of Babur and, after him, his son Humayun who succeeded Babur in 1530 A. D.⁹ To Humayun is attributed the erection of several mosques in the district, such as the old Jami Masjid at Saharanpur (built in 936 A.H. or 1530 A.D.), and the one at Ambahta.¹⁰ He also built the mausoleum of the saint, Shah Abdul Quddus at Gangoh, in 944 A.H. (1538 A.D.). The saint had two sons, Sheikh Ahmad and Sheikh Ruknuddin, the latter succeeding his father in the pontificate.¹¹

1 *Ibid.*, pp. 211, 224; Fuhrer, *op. cit.*, pp. 14, 15

2 Elliot and Dowson, *op. cit.*, Vol. IV, pp. 250, 290; Nevill, *op. cit.*, p. 182

3 *Ibid.*, p. 335; Fuhrer, *op. cit.*, p. 18

4 Nevill, *op. cit.*, p. 182

5 *Ibid.*; Atkinson, *op. cit.*, p. 248

6 Nevill, *op. cit.*, p. 182; Haig, *op. cit.*, p. 250

7 Nevill, *op. cit.*, p. 182; Atkinson, *op. cit.*, p. 248

8 *Ibid.*; Nevill, *op. cit.*, pp. 183, 241

9 *Ibid.*, p. 182

10 *Ibid.*, pp. 211, 323; Fuhrer, *op. cit.*, pp. 14, 18

11 *Ibid.*, p. 15; Nevill, *op. cit.*, p. 241

In 1540, Humayun was defeated and driven out of India by Sher Shah Sur who established his own dynasty at Delhi. The only incident recorded by the historians in connection with this district, during the fifteen years rule of the Sur dynasty, is the rebellion of Alam Khan Miana who, about 1545, the last year of Sher Shah Sur's reign, raided the province of Meerut and plundered the whole country. His operations must have affected this district, since he crossed the Yamuna in the north and attacked Sirhind, near which place he was defeated and slain by Malik Bhagwant, the governor of this tract and a subordinate of Khawas Khan who held Delhi on behalf of the sultan and administered the country dependent on the capital.¹

Humayun returned to India in 1555 and recovered the throne of Delhi from the Sur kings, but died soon afterwards. He was succeeded by his young son, Akbar (1556—1605), who by winning a decisive victory at the second battle of Panipat, in 1556, became the sole master of the kingdom. It was also in that year (963 A.H. or 1556 A.D.) that the Jami Masjid at Gangoh was built,² probably at the orders of the emperor and at the instance of Sheikh Rukn-ud-din, son and successor of the saint Shah Abdul Quddus, who was amongst the learned men assembled at the court of Akbar in the early years of his reign.³ His nephew and Sheikh Ahmad's son, Sheikh Abdun-nabi, was several times in Mecca where he studied the *Hadis*. He succeeded the celebrated Maulana Abdullah of Sultanpur in the favour of the court, and was at all times a man of mark at Delhi. He had many enemies, including Makhdum-ul-Mulk, who charged him of murder, infilial conduct and haemorrhoids, and demanded his degradation, in which they succeeded. In fact, he had been the Sadr of the empire from 1564 to 1577, during which time he had given much offence by his mode of treating the holders of state lands.⁴ The arbitrary execution of a Brahmana led to his deposal from office; and in 1578 Akbar gave him money for the poor of Mecca, and sent him on a pilgrimage. When he came back, he was called to account for the money, was put into prison, and there murdered in 1584 A. D.⁵

The records preserved in the *Ain-i-Akbari* are of interest as showing the economic and administrative condition of the district at that period.⁶ Saharanpur had by then grown into a town of large size⁷, and gave its name to a sirkar in the subah (province) of Delhi, which was divided into the four

1 *Ibid.*, pp. 182-183; Elliot and Dowson, *op. cit.*, Vol. IV, p. 407

2 Fuhrer, *op. cit.*, p. 15; Nevill, *op. cit.*, p. 241

3 *Ibid.*; p. 183; Atkinson, *op. cit.*, p. 248

4 *Ibid.*; Abul Fazl: *The Ain-i-Akbari*, Vol. I (Trans. by H. Blochmann), pp. 186-187, 615-616; Elliot and Dowson, *op. cit.*, Vol. V, p. 542

5 Atkinson, *op. cit.*, p. 248; Nevill, *op. cit.*, p. 183

6 *Ibid.*, p. 183; Abul Fazl: *Ain-i-Akbari*, Vol. II (Trans. by H. S. Jarrett), pp. 112, 296-297

7 Nevill, *op. cit.*, p. 320

dasturs (subdivisions or districts) of Deoband, Kairana, Sardhana and Indri. The Saharanpur sarkar, comprising four *dasturs*, extended from the Siwaliks into the present Meerut district, covering almost the entire of the intervening district of Muzaffarnagar. The unit was further subdivided into 36 *mahals* or parganas.¹ With an area of 35,30,370 bighas and 3 biswas yielding a revenue of 8,78,39,659 dams exclusive of 49,91,485 dams assigned as Seyurghal in all furnishing 3,955 cavalry and 22,270 infantry. A large number of these *mahals* lay beyond the existing Saharanpur boundary and the remaining ones were included in the Deoband *dastur*, which embraced a good deal of the Muzaffarnagar district and was by far the largest of the four. The names of the *mahals* in some cases have been retained to this day, but the boundaries have been altered from time to time, especially in the days of Rohilla supremacy, during the later half of the 18th century, and in the earlier years of British rule.²

Of the *mahals* represented in the present district, that of Saharanpur (Haveli) was held by the Afghans, Kulals and Tagas who undertook to furnish 100 cavalry and 800 infantry. It is also stated that the suburban district of Saharanpur had a brick fort and that cotton fabrics of *khassa* and *chautar* varieties were made there in perfection. To its north lay the *mahal* of Raipur Tatar, corresponding to the present pargana of Faizabad, which was held by the Tagas, and provided ten horse and 200 foot soldiers. Muzaffarabad was a large *mahal*, in the possession of the Rangars and the Sanders, respectively the Muslim and Hindu Pundirs (Rajputs), who supplied 20 horse and 200 foot. The *mahal* of Roorkee (Rurki) was known by its present name, mainly contained forest area, and was held by the Rajputs, Sadbars, Tagas and Brahmanas, who together contributed 25 cavalry and 200 infantry. The *mahal* of Jwalapur (Jauli), then known as Bhogpur and a Hindu place of worship, had its headquarters at Hardwar where a brick fort stood on the banks of the Ganga, was held by the Rajputs, and had an allotted levy of 100 horse and 1,000 foot. The present pargana of Bhagwanpur lies partly in the then *mahal* of Jaurasi which was held by people called the Bidars who supplied 20 horse and 200 infantry. Adjoining it was the *mahal* of Malhipur, now part of pargana Haraura, which was owned by the Afghans, Tagas and Brahmanas, whose total contingent consisted of 100 cavalry and 500 foot soldiers. Manglaur, a town with a brick fort, gave its name to a *mahal* which was in the possession of the Brahmanas and Bargujars, who furnished 40 horse and 300 foot. Deoband also had a brick fort, and was a very large *mahal*, its zamindars being the Gujars and the Tagas, and local levies numbering 60 horse and 300 infantry. The *mahal* of Rampur was held by the Sadbars and the Tagas, who provided 50 horse and 400 foot soldiers. To its south lay the *mahal* of Nanauta, which was held by

1 *Ibid.*, p. 183; Abul Fazl, *op. cit.*, Vol. II, pp. 112, 296-297

2 Nevill, *op. cit.*, p. 183

the Afghans and furnished 40 horsemen and 300 infantry. The *mahal* of Bhatkanjawar (Behat Kanjawar) covered the present pargana of Sultanpur, was held by the Tagas and Barhahs, and maintained a contingent of 50 cavalry and 500 foot soldiers. Sarsawa had a brick fort and gave its name to a *mahal*, owned by the Tagas who contributed a force of 30 horse and 200 foot. The *mahal* of Nakor (Nakur) was the property of the Afghans and the Brahmanas, who supplied 40 cavalry and 300 infantry. The small *mahal* of Ambihta (Ambahta) was held by the Gujars and the Aawans (probably Saiyids), who provided a levy of 20 horse and 300 foot. The two *mahals* of Gangoh and Lakhnauta were the property of the Turkmans, a warlike race, who furnished the imposing force of 600 cavalry and 4,000 infantry.¹ A part of the *mahal* of Lakhnauta, it would seem, lay in the present district of Muzaffarnagar, but at the same time a portion of the present pargana of Gangoh of this district belonged to the *mahal* of Thana Bhawan (now a pargana of district Muzaffarnagar) which was much larger than it is today.

The district was, in the time of Akbar and his immediate successors, under a governor residing at Saharanpur, and there were mints for copper coinage at Saharanpur and Hardwar.² Abul Fazl, the court historian of Akbar, refers in his works to Maya (Mayapur) or Hardwar, and it is said that the emperor always used to be supplied with drinking water from the Ganga at that place.³ The land had peace, and the general tranquillity is reflected in the absence of incidents that would have attracted the attention of the historians. For the same reason, the charge of Saharanpur was an unimportant one, and consequently was seldom given to persons of noted capacity or distinction. Being under the immediate control of Delhi, the district was a mere appanage of that government and became a favourite place of resort for the nobles of the court, to whom the cool and comparatively healthy climate, and the facilities it afforded for hunting, rendered it peculiarly attractive.⁴

The most remarkable feature of the statistics given in the *Ain-i-Akbari* is the surprising state of development that the district had then attained. The tract must have been in as highly cultivated a condition as at the close of the 19th century, the total cultivated area then being also much larger than the normal amount under tillage about the beginning of the present century, and the revenue obtained from this area by Akbar, too, was vastly greater than that assessed at the latter period. There is no doubt that the share then taken by the state represented a far larger proportion of the produce than the revenue paid to government by the zamindars even in the early years of this century. The richness and fertility

1 *Ibid.*, pp. 183-185; *Ain-i-Akbari*, *op. cit.*, Vol. II, pp. 296-297; Atkinson, *op. cit.*, pp. 132-133

2 *Ibid.*, pp. 185, 253

3 *Ibid.*, p. 253

4 *Ibid.*, pp. 186-187

of the upper doab were proverbial, and the country was rightly regarded as the granary of the empire. It was seldom visited by famine, and this peaceful condition of affairs was maintained till political disturbances brought war into the tract and opened up the rich fields of the district to the marauders from the Punjab and the south.¹

During the reign of Jahangir (1605—1627), his consort, the empress Nur Jahan, is said to have resided for a short time in a Gujar village to the north of the Tughlakpur pargana, where some remains of her mansion were visible about the close of the last century, and her name is perpetuated in that of the village of Nurnagar² situated to the north of Muzaffarnagar. In 1621, Jahangir himself came to Hardwar, though his stay was brief, as he found the climate disagreeable and no place appropriate for a residence.³ Several monuments in the district also date from his reign : the Reri Masjid at Gangoh was built in 1034 A. H. (1625 A. D.),⁴ and the mausoleum of Makhdum Shah Alauddin Ahmad Salim Chishti at Piran Kaliar near Roorkee in 1036 A. H. (1627 A. D.),⁵ the village of Jahangirabad being also probably named after this emperor.⁶

Under Shahjahan (1627—1658 A.D.), the celebrated Ali Mardan Khan laid down a garden, named Badshahi Bagh, and in it built a royal hunting lodge, known as Badshahi Mahal, on the left bank of the Yamuna, to the north-west of the Faizabad pargana. The palace was pleasantly situated opposite to the headworks of the Delhi canal, and its portions were standing till the beginning of the present century. To the same nobleman is due the construction of the canal, the Delhi or Doab canal and later known as the eastern Yamuna canal. He is said to have himself designed the canal, which was conducted, with a considerable knowledge of hydraulics, along the crest of the high ground between the Yamuna and the Hindan, so as to admit of its water being thrown off on both sides for irrigation purposes. The canal was, however, little used till long afterwards. Property in money and jewels left by this powerful minister, Ali Mardan Khan, at his death was estimated at a sum equal to 18,00,000 *l*.⁷ It was also in this reign that the small *mahal* of Jahangirabad was separated from Raipur Tatar, about the same time that the latter's name was altered to Faizabad which became for a while the capital of the sirkar.⁸ The headquarters of the *mahal* of Behat Kanjaware was also removed to Sultanpur after which that *mahal* now came to be

1 *Ibid.*, p. 186

2 *Ibid.*, p. 187 ; Atkinson, *op. cit.*, pp. 248-249

3 Elliot and Dowson, *op. cit.*, Vol. VI. p. 382 ; Nevill, *op. cit.*, pp. 187, 235

4 *Ibid.*, p. 241 ; Fuhrer, *op. cit.*, p. 15

5 *Ibid.*, p. 18

6 Nevill, *op. cit.*, p. 240

7 *Ibid.*, p. 187 ; Atkinson, *op. cit.*, p. 249 ; Thorat, *op. cit.*, Vol. IV, p. 599

8 Nevill, *op. cit.*, p. 185

designated.¹ What is now the Nilgiran Masjid at Saharanpur was originally built in 1054 A.H. (1644 A.D.) during Shahjahan's reign.²

In the reign of Aurangzeb (1658—1707 A.D.), the sirkar of Saharanpur was bestowed upon Sheikh Muhammad Baka, a scholar of note and the reputed author of *Mirat-i-Alam*, who held this post till his death in 1683 at the age of 57. He erected many buildings in the town of Saharanpur, including several mosques and wells, and the houses by the side of the Raiwala tank in the suburbs, and gave his name to the Bakapura *muhalla* of the town.³ Under Aurangzeb, a mosque was built at Saharanpur in 1078 A.H. (1668 A.D.),⁴ the Lal Masjid at Gangoh by one Faqir Nur Muhammad in 1081 A.H. (1671 A.D.),⁵ and the Jami Masjid in village Jaurasi, some 10 km. east of Roorkee, in 1086 A.H. (1676 A.D.), probably at the orders of emperor himself.⁶ A pakka well, known as Haqimwala, in Jwalapur, bears a Sanskrit inscription dated *Samvat* 1725 (A.D. 1668).⁷

It was during the 17th century that the Pirzada family of the Saiyids of Ambahta gained prominence under their leader Shah Abdul Maali who was, after his death, buried in the middle of the town, in a fine domed tomb with minarets.⁸ The Rajputs of the Pundir clan also appear to have been wealthy and powerful, under the leadership of the Ranas of Jasmaur, particularly in the Muzaffarabad and Faizabad parganas.⁹ And in the western parganas of the district, the Gujars, headed by the chieftains of the Khubar gotra, seem to have carved out a considerable principality.¹⁰

A new era commences with the death of Aurangzeb, in 1707, and the gradual disruption of the Mughal empire which then ensued. The growing disorder was first emphasised by the rising of the Sikhs under their leader, Banda Bairagi. Taking advantage of the absence of the emperor Bahadur Shah I (1707—1712) in the Deccan, they poured in irresistible numbers into Sirhind, murdering, plundering and burning wherever they went. After defeating Wazir Khan, the governor of Sirhind, in a pitched battle, the Sikhs besieged and sacked that town, and gathering strength from this success, crossed the Yamuna, took possession of the country up to its right bank and ravaged the upper doab.¹¹ This caused consternation at Saharanpur, then

1 *Ibid.*, pp. 185—215

2 *Ibid.*, p. 323; Fuhrer, *op. cit.*, p. 18

3 Nevill, *op. cit.*, p. 187

4 Fuhrer, *op. cit.*, p. 18

5 *Ibid.*, p. 15

6 *Ibid.*, p. 18

7 *Ibid.*

8 Nevill, *op. cit.*, p. 211

9 *Ibid.*, p. 127

10 *Ibid.*, p. 117

11 Atkinson, *op. cit.*, p. 249; Nevill, *op. cit.*, p. 187

held by Ali Muhammad Khan as its governor, who incontinently fled to Delhi.¹ The other officers and the townspeople, however, were made of sterner stuff, and they proceeded to put the place in a state of defence so that when the Sikhs crossed the river and began to plunder the rich plain of the doab, they met with a stout resistance. It appears, however, that the efforts were but partially effective as the invaders gained possession of a major part of the town, where they distinguished themselves by frightful atrocities.² When they were overrunning the doab, the Sikhs were checked at Jalalabad, in district Muzaffarnagar, by the brave defence offered by Jalal Khan, the founder and *faujdar* of the place. The people of the district, too, had done their best, and it is recorded that many towns and villages managed to resist the marauders. Foiled at Jalalabad, the Sikhs recrossed the Yamuna and continued their depredations in the Punjab.³

In the following year, the Sikhs returned and again advanced towards Delhi, perpetrating on their way scenes of outrage and violence. The emperor himself was, therefore, constrained to lead a force against them in 1710, which after a long campaign succeeded in defeating and driving them into the hills, at least for a time. The emperor retired to Lahore, leaving a detachment to watch the enemy and prevent their approaching the doab.⁴

This reverse seems to have checked their energies for some time, since nothing more is heard of the Sikhs till the early years (1714—1716) of the reign of Farrukhsiyar (1713—1719), when they again broke out in the Punjab, ravaged all the country from Lahore to Sirhind, threatening once more the doab and spreading death in every direction. Their victorious career was, however, checked by Abd-us-Samad Khan, the governor of Lahore, who first defeated them in a pitched battle and then captured their stronghold of Gurdaspur, together with their leader, Banda Bairagi, who was put to death. For many years after this the Sikhs remained quiet, recruiting their shattered forces, and nothing is heard of them again until the almost entire absence of authority in the upper doab afforded them the desired opportunity for repeating their incursions.⁵

To this period belongs the establishment of a colony of the Pathans by Abdullah Khan, the son of Jalal Khan mentioned above as the founder of Jalalabad, who quelled a Gujar rising and expelled the old inhabitants of Gujarwala, so named from the predominance of its Gujar inhabitants, and also changed the name of the place to Islamnagar.⁶ At Sakrauda, some

1 *Ibid.*; Elliot and Dowson, *op. cit.*, Vol. VII, p. 415

2 Nevill, *op. cit.*, pp. 187-188

3 Nevill, *op. cit.*, p. 188

4 *Ibid.*; Atkinson, *op. cit.*, p. 249

5 *Ibid.*; Nevill, *op. cit.*, p. 188

6 *Ibid.*, p. 259

8 km. to the north of Bhagwanpur in tahsil Roorkee, stands the fine mausoleum of Shah Rak-din alias Shah Pungam, built in A. H. 1118—1129 (A. D. 1707—1716). The central room of the building, housing the saint's grave, is surrounded by a verandah supported on elegantly carved pillars. It has a very pleasing effect from its artistic form, which is set off with flowers and fantastic designs painted in stucco that conceals the masonry.¹

Another reason for the comparative quiet of this district lay in the increasing power of the famous Saiyid brothers, Husain Ali and Abdullah Khan, of Barha, who belonged to the Tihanpuri branch of the Saiyid family settled at Jansath in the Muzaffarnagar district.² From 1712 onwards they extended their possessions rapidly and became practically supreme throughout the districts of Muzaffarnagar and Saharanpur. During the reign of Farrukhsiyar, the two brothers became the most powerful persons in the empire, but their ascendancy naturally rendered them objects of hatred and suspicion, which in time developed into civil war. The Saiyids were at first victorious, but the turning point in their fortunes came with the assassination of Husain Ali in 1721 and the defeat of Abdullah Khan at Husainpur the same year. Their possessions were conferred on Muhammad Amin Khan who held the title of Itimad-ud-daula, but he died shortly afterwards, before he had fully established his authority in this district.³

Itimad-ud-daula was followed, in the possession of the Saiyid estates in this district, by the imperial vizir, Qamr-ud-din, who had all along been the implacable enemy of the Saiyids. He was for a long time engaged in other parts of the empire, and confined his attention to withholding the Saiyids from all posts of importance; but eventually in 1737, feeling that his efforts had not been completely successful, he determined to destroy his enemies once and for all. In order to achieve this purpose, the vizir despatched Marhamat Khan to Saharanpur as governor, with orders to expel the Saiyids from the district and resume all their jagirs. In carrying out these commands Marhamat Khan acted with such violence and brutality that the Saiyids rose as one man and slew him. This was what the vizir most desired, and assembling an overwhelming force which mainly consisted of the Turanis together with a body of Rohilla Afghans led by their chieftain Ali Muhammad Khan of Aonla, he entrusted the general command to his own brother, Azimullah Khan. The latter quickly overran the whole district. Saifuddin Ali Khan, the then leader of the Tihanpuri Saiyids, was utterly defeated at Bhainsi, and their headquarters, Jansath, was taken by storm and given over to destruction. With this memorable capture and sack of Jansath the power of the Saiyids was utterly broken and many of them fled to various

1 Fuhrer, *op. cit.*, p. 14

2 Atkinson, *op. cit.*, pp. 249-250; Nevill, *op. cit.*, p. 188

3 *Ibid.*; Atkinson, *op. cit.*, pp. 249-250

parts of India.¹ The resumption of the Saiyid jagirs was completed by Azimullah Khan, who established his authority throughout the district.²

In 1739, Nadir Shah Durrani invaded India and sacked Delhi, causing disruption and conditions of anarchy, so that on his departure the doab, including this district, became a scene of utter confusion. Taking advantage of the situation, the Rohillas began to extend their authority beyond the Ganga, while the local chieftains, notably the Gujars of Landhaura, first attained a position of any importance.³

Azimullah Khan was transferred to Malwa in 1740, and Saharanpur was conferred on Hafiz-ud-din Khan who, however, fell into disfavour, two years later, along with other Turanian nobles, and was deposed.⁴ In the last years of the reign of the emperor Muhammad Shah (1719—1748), the fief of Saharanpur appears to have been held by Zafar Khan, better known by his title of Roshan-ud-daula and as the builder of the mosque which bears his name in the Chandni Chauk at Delhi. This nobleman bestowed the pargana of Ambahta in this district on Shah Muhammad Bakir, son of the famous Mir Shah Abdul Maali.⁵

On Ahmad Shah Abdali's arrival in 1748 Ali Muhammad Khan Rohilla, left Sirhind reaching Saharanpur on 24th February and crossed the Ganga at Daranagar on 1st March with a view to drive out the *faujdar* of Bareilly.⁶

Shortly after the death of Muhammad Shah and the succession to the imperial throne of Ahmad Shah, in 1748, troubles arose in the doab owing to the quarrel of Safdar Jang, the nawab-vizir of Avadh, and Shihab-ud-din, best known by the family affix Ghazi-ud-din Khan, who had succeeded his uncle, Ghazi-ud-din I, in command of the imperial forces. Safdar Jang sent an army under his general, Indargir Goshain, which ravaged the upper doab, and occupied Saharanpur itself. Ghazi-ud-din Khan enlisted the aid of the Rohillas who joined the imperial forces under the leadership of Najib Khan. The latter had already distinguished himself in the service of the Rohilla chief Ali Muhammad Khan and held grants of land in the adjoining district of Bijnor. At the battle of Kotila, which took place between the two armies, Najib Khan further distinguished himself so much that he was rewarded with the parganas of Saharanpur (and Budhana in district Muzaffarnagar), together with all the territories of the Barha Saiyids.⁷ Chait

1 *Ibid.*, p. 250; Nevill, *op. cit.*, pp. 188-189

2 *Ibid.*, p. 189

3 *Ibid.*

4 *Ibid.*

5 Srivastava, A. L. : *The First Two Nawabs of Awadh*, p. 109

6 *Ibid.*; Atkinson, *op. cit.*, p. 250

7 *Ibid.*; Nevill, *op. cit.*, pp. 189-190

Singh, the Gujar chief of Bahsuma (in district Meerut), attempted for a time to resist his authority, but before the end of 1754, Najib Khan had reduced his new possessions to obedience.¹

At the same time, Najib Khan had been constantly engaged at Delhi where he stood high in favour of emperor Ahmad Shah, whom he had rescued from the machinations of Safdar Jang in 1753, and of his successor, Alamgir II, who raised Najib Khan to the dignity of Amir-ul-umra, with the personal title of Najib-ud-daula. His advancement aroused the jealousy of Ghazi-ud-din Khan who deprived Najib-ud-daula of his offices and compelled him to retire to Saharanpur. There in 1757 he received the fugitive prince Ali Gauhar, afterwards the emperor Shah Alam, and gave him an allowance of Rs 50,000 per mensem.² Ghazi-ud-din Khan then induced the Maratha chief, Mahadaji Sindhia, to attack the Rohillas, and a large force was sent into the doab under one Jhanku. Najib-ud-daula was compelled to shut himself up in the castle of Shukartal, which was his strongest fortress and commanded the passage of the Ganga. Being in great straits, and because Jhanku had detached Gobind Pandit to cross the river at Hardwar and then to ravage the entire district of Bijnor, Najib-ud-daula implored the aid of the Rohilla leaders and the nawab-vizir of Avadh, Shuja-ud-daula, as well as of Ahmad Shah Abdali who was contemplating a third descent on Hindustan. Shuja-ud-daula responded to the request by marching into Rohilkhand and driving out the invaders, at the same time relieving the pressure on Shukartal. Thereupon Ghazi-ud-din Khan in person came to the assistance of Jhanku, but Najib-ud-daula seized his opportunity and escaped to Saharanpur, where he joined hands with Ahmad Shah Abdali. Soon afterwards Jhanku was worsted in a skirmish and driven to Delhi, where he was again severely defeated. Thus by November, 1759, the Marathas were driven with heavy loss across not only the Ganga but from the upper doab.³

It was about this time that Chaudhri Manohar Singh, the Gujar chieftain of Landhaura, rose into prominence. He appears to have been the first chief of his clan to obtain recognition from the ruling authority. He succeeded, in 1759, in securing a grant of 505 villages and 31 hamlets from Najib-ud-daula. This grant was obviously in confirmation of existing conditions rather than any bestowal of a new property. Najib-ud-daula was at that time endeavouring to consolidate his acquisitions in the doab and was glad to purchase the assistance of such a powerful ally as the head of the leading subdivision of the Gujar clan. Chaudhri Manohar Singh was succeeded by Lal Kunwar.⁴

¹ Atkinson, *op. cit.*, p. 250

² Nevill, *op. cit.*, p. 190

³ *Ibid.*; Stratchey, J. : *Hastings and the Rohilla War*. (Oxford, 1892), p. 20 ; Franklin W. : *History of the Emperor Shah Aulahi*, pp. 12—15; Srivastava, A. L. : *Shuja-ud-Daulah*, Vol. I, pp. 71—74

⁴ Nevill, *op. cit.*, p. 117

In fact, Najib-ud-daula had been devoting all his energies, at least since 1754, to the extension and consolidation of his power and domains which now stretched on the north not only to the Siwalik hills, but across them into the Dun which he had conquered about 1757; on the west they were bounded by the Yamuna and contained the fortress of Ghausgarh; on the east they extended into the Bijnor district, with the fortresses of Pathargarh and Najibabad; and on the south he held Shamli in the Muzaffarnagar district, and the lands up to the border of the Meerut district, which were commanded from his fort at Shukartal on the banks of the Ganga.¹ The town of Saharanpur, too, gained unprecedented importance since Najib-ud-daula chose it for his capital.²

The emperor Alamgir II was murdered in 1759 and was succeeded by prince Ali Gauhar, under the name of Shah Alam.³ Not long afterwards, Ahmad Shah Abdali invaded the country once more, being invited, amongst others, by Najib-ud-daula and Shuja-ud-daula, with a view to liberate them principally from the recurring onslaughts of the Marathas. At the third battle of Panipat, in 1761, in which the Marathas were eventually routed, the Rohillas had formed the right wing of the Abdali's army.⁴ For the distinguished part he had played for the benefit of the Abdali, Najib-ud-daula was once more given the title of Amir-ul-umra and was made *bakhshi* (prime minister) of the Mughal empire.⁵

He now became absolute in Delhi, having in his care Jawan Bakht, the son of the absent emperor, Shah Alam, who was away at Allahabad. Najib-ud-daula's power was, however, threatened by Suraj Mal, the Jat raja of Bharatpur, but the latter, while on a hunting expedition in the neighbourhood of Ghaziabad (in Meerut district), was killed in a surprise attack by the Rohillas on the banks of the Hindan, in December, 1763. An attempt at war in 1764, on the part of Suraj Mal's son Jawahir Singh, was averted partly by the diplomacy of Najib-ud-daula.⁶

Strong as he was, Najib-ud-daula could not, however, preserve even his own estates intact from invasion. The battle of Panipat had practically restored the Punjab to the Sikhs, who at once recommenced their plundering expeditions into these parts. In 1763, an immense Sikh force crossed the Yamuna and actually sacked the town of Saharanpur, thence ravaging the country far to the south. In the next year the 'Budhadal', as the Sikh army was called, plundered all the doab from the Siwaliks to Meerut, and even crossed into the district of Bijnor. In this they were assisted by the Gujars who reduced the country to utter anarchy. Najib-ud-daula was absent at Delhi, and his Rohilla generals arrived on the scene too late to punish the marauders

1 *Ibid.*, p. 190; Atkinson, *op. cit.*, p. 250

2 Nevill, *op. cit.*, pp. 320-321

3 Francklin, *op. cit.*, p. 17

4 *Ibid.*, pp. 21-24

5 *Ibid.*, Nevill, *op. cit.*, p. 191

6 *Ibid.*

who had withdrawn unmolested. The Sikhs came again in 1767 in greater strength than ever, and swept through the west of the district, plundering Nanauta and other towns. At Meerut they were checked, and during their retreat northwards they were badly beaten near Shamli in the Muzaffarnagar district. No sooner, however, had the imperial troops returned than the Sikhs again sallied forth, burning Nanauta and all the villages they came across as far as Kandhla in the Muzffarnagar district. Najib-ud-daula then himself took the field and succeeded in clearing the district, eventually driving the Sikhs from Nanauta and Islamnagar to the fords of the Yamuna.¹ Thus the district had hardly been made free from Maratha inroads on the south that it suffered severely, between 1761 and 1770, from at least the four distinct Sikh invasions on the west, which took place during that period.²

A few years before his death, Najib-ud-daula had been compelled by ill health to resign his post of prime ministership of the empire and return to his new home at Najibabad, in the Bijnor district. He died after several years of sickness in 1770, and his younger son, Zabita Khan, succeeded to his vast estates, and made Saharanpur his principal seat.³

Zabita Khan had already attained great power and influence at the court of Delhi and now hoped to retain his father's position, but his designs were frustrated by the return from the east of the emperor, Shah Alam, who invoked the assistance of the Marathas. The latter still cherished a deadly enmity against the house of Najib-ud-daula, and consequently Zabita Khan left the capital and proceeded to Saharanpur.⁴ On reaching that place one of his first acts was to refuse the tribute due to the emperor, and make preparations for a vigorous defence. Knowing that he was in disfavour with the court, then entirely under Maratha influence, he set about collecting troops and fortifying the strong places in his district. He relied mainly on the strength of his fort at Shukartal where he awaited the attack of the royal army.⁵ On learning of the advance of the Marathas into the doab which they came ravaging, and that they were shortly afterwards joined by the imperial army under Najaf Khan, he had already sent all his family and goods over the Ganga before he himself arrived at Shukartal. There he was joined by Hafiz Rahmat Khan and other Rohilla chiefs. In December, 1771, however, when he found that the Marathas had crossed the Ganga at Hardwar so as to threaten his line of retreat, he hastily fled, after a half-hearted battle, leaving all the doab, with the exception of Ghausgarh, in the hands of his enemy. The Rohillas then gave way to panic, flying to the hills, whence they sent urgent messages for aid to Shuja-ud-daula. In the meantime Saharanpur had been occupied by the imperial army, and having appointed another governor there the emperor returned to Delhi. Peace was, however,

1 *Ibid*

2 Atkinson, *op. cit.*, pp. 250-251

3 *Ibi-l.*; Nevill, *op. cit.*, p. 191

4 *Ibid.*, pp. 191-192

5 *Ibid.*, p. 192; Atkinson, *op. cit.*, p. 251

concluded in June, 1772, chiefly because the Marathas were anxious to return to their own country. It was also through their instrumentality that Zabita Khan regained possession of his estates in the doab.¹

The other Rohilla chiefs were, however, left to their fate, their power being finally broken by defeat and death of Hafiz Rahmat Khan at the hands of Shuja-ud-daula and his British allies, in April, 1774.²

In the meantime, Zabita Khan's treachery had been further exemplified by his entering into negotiations with the Marathas barely two months after the treaty of 1772. Consequently, he regained much of his power, together with the coveted title of Amir-ul-umra. His influence at court, was but small owing to the predominance of Najaf Khan, and this led to a quarrel.³

In 1774, the Sikhs again put in an appearance and ravaged the entire upper doab, plundering nearly every considerable town from Saharanpur to Meerut. Zabita Khan, finding himself powerless to oppose them, bought them off, in the following year, by a payment of Rs 50,000. They then proceeded into Muzaffarnagar. On their return, Zabita Khan entered into an alliance with their chiefs, and on its strength openly rebelled against the emperor. He had also taken number of Sikhs into his employ.⁴ Marching down the doab, the Sikhs fought an unsuccessful battle with the imperial troops near Budhana, and then retreated to Amirnagar where, in March, 1776, they inflicted a severe defeat on their opponents, killing Abdul Qasim Khan, the brother of Najaf Khan, who had been sent from Delhi against them. They then seized all the doab, and the imperial authority was little regarded in this district. But, shortly afterwards they were checked by Najaf Khan himself, who overthrew the allies, the Rohillas and the Sikhs, near Ghausgarh in 1777. A reconciliation was then effected, Zabita Khan was again pardoned and even succeeded in regaining the favour of his conqueror and in getting himself confirmed in his government of Saharanpur, although his power had been broken and he does not appear to have taken any further active part in politics.⁵

His country was, however, constantly exposed to Sikh attacks, as their plundering hordes crossed the Yamuna every year from 1778 to 1781, when they were severely handled by Mirza Muhammad Shafi (Najaf Khan's nephew) who defeated them near Meerut, pursued them to the river and carried the war into their own country. The cis-Sutlaj chiefs, that is, the Sikhs, irritated at Zabita Khan's defection, for which they never forgave him, gave him little peace during the remainder of his life. In 1783, they renewed their

1 *Ibid.*; Nevill, *op. cit.*, p. 192; Srivastava, *op. cit.*, Vol. II, pp. 189—204

2 *Ibid.*, pp. 241—252; Nevill, *op. cit.*, p. 192

3 *Ibid.*

4 *Ibid.*; Atkinson, *op. cit.*, p. 251

5 *Ibid.*; Nevill, *op. cit.*, pp. 192-193

incursions, when the land was suffering from famine, ravaging the whole district of Saharanpur up to the Ganga, and even entering the Dehra Dun district from Hardwar. Zabita Khan was helpless and shut himself up in his fortress of Ghausgarh, where he died in 1785.¹ In 1193 A.H. (1779 A.D.) he had built a mosque at Saharanpur, which is one of the four fine old masjids existing in the town,² and at village Jhabarher, in tahsil Roorkee, a pakka well was built in 1198 A.H. (1784 A.D.).³

Zabita Khan was succeeded by his son, Ghulam Qadir Khan, a man of bold and determined character, little likely to yield to his enemies without a struggle but of a cruel disposition and an ungovernable temper. His first act was to confiscate the jagirs of many of the principal men in his districts, even including his relatives, and amongst them that of his own uncle, Afzal Khan. He then reannexed all the territories held by his grandfather, Najib-ud-daula, reconquered the Dun, and strongly fortified his castle of Ghausgarh. These territories had been, during the recent troubles, occupied by the Sikhs who, too, were now held in check; his activity made him respected by them. For the first time for many years, the country enjoyed peace under a strong government. The period of his rule, though eventful, was, however, brief.⁴

In 1787, taking advantage of the death of Najaf Khan, Ghulam Qadir Khan led his forces down the doab to Delhi. The Marathas were then engaged elsewhere, as Sindhia was fighting with the raja of Jaipur, and Mansur Ali Khan, who was in charge of the imperial palace, urged Ghulam Qadir Khan to seize the vacant office of Amir-ul-umra. The Maratha commandant of the capital sent a small force to oppose the Rohillas who, however, defeated it with great slaughter and thus gained possession of the imperial city. But, the Rohilla force was checked by the determined attitude of the Begam Samru of Sardhana, who so intimidated the rebels by her advance that they withdrew across the Yamuna. Soon afterwards Ghulam Qadir returned to attack, and though Najaf Quli Khan came to the assistance of the emperor, he stood his ground.⁵ He next proceeded to take possession of the doab as far as Aligarh, when a reconciliation was effected, and the Amir-ul-umra returned in triumph to Saharanpur.⁶

The next year, Ghulam Qadir again descended on Delhi, bent upon plundering the imperial palace, as Shah Alam had roused his wrath by calling on the Marathas for assistance. Having gained access to the fort by treachery, he seized the person of the emperor and proceeded to loot the women's apartments.⁶ Thus, after subjecting the miserable sovereign to every insult

1 *Ibid.*, p. 193; Atkinson, *op. cit.*, p. 251

2 Fuhrer, *op. cit.*, p. 18

3 *Ibid.*, p. 16

4 Atkinson, *op. cit.*, p. 251; Nevill, *op. cit.*, p. 193

5 *Ibid.*, pp. 193-194

6 *Ibid.*, p. 194

which malice and insolence could devise, he deprived him of sight by the point of his dagger. In this way Ghulam Qadir consummated a series of excesses, which Captain Grant Duff has pronounced to be "almost without parallel in the history of the world."¹ The approach of the Marathas was now imminent, and Mahadaji Sindhia, who sent his forces to Delhi under the command of Rana Khan, dispossessed Ghulam Qadir of his conquest, and avenged the wrongs of the unhappy emperor of Delhi upon the person of his brutal enemy. The troops of the Begam Samru, under the command of her lieutenant, George Thomas, were also helping the Marathas in this object. Ghulam Qadir sought safety in flight, and with 500 followers fled to Meerut, occupying the fort there.² He was not, however, destined to find safety there. Two Maratha generals, who had pursued him, besieged the fort and captured it. The followers of Ghulam Qadir deserted him and, cutting his way through the besiegers, he attempted to escape to Saharanpur. Having stuffed his saddle bags with as much jewellery as he could lay his hands on, he escaped one night on horseback through a sallyport, but was captured by Bhika, a Brahmana, in an unconscious state from a pit in the village of Jauce near Kotana in district Meerut. He was handed over to the Maratha general, Rana Khan, his jewel-laden horse being captured by Lestonneau, a French soldier in Sindhia's service.³ Ghulam Qadir was now loaded with irons and exposed in a cage, being subsequently deprived of his eyes, nose, ears, hands and feet. Thus horribly mutilated he was ordered to be sent back to Delhi. He, however, never reached the scene of his atrocities, having died on the road.⁴

Thus ended the Rohilla domination and thereafter the district was held by the Maratha chieftain, Mahadaji Sindhia. The first Maratha governor of this region was Ghani Bahadur of Banda, who managed to keep the Sikhs quiet by allowing them to hold portions of the district in farm. Thus in 1790, the Sikh sirdars, Rai Singh of Jagadhri and Sher Singh of Burhiya, took possession of parts of the Gujar *muqarrari* of Landhaura in the parganas of Manglaur, Jaurasi and Jwalapur.⁵ In the next year, they were compelled to surrender these possessions by the new governor, Bhairon Pant Tania, but for some time both of them held the greater part of pargana Sultanpur and Rai Singh occupied the entire pargana of Nakur. They and other Sikh chiefs in the Muzaffarnagar district agreed to keep out their countrymen, but quarrels soon arose among themselves, with the result that Rai Singh had to appeal to the Marathas for assistance.⁶

1 Thornton, *op. cit.*, Vol. IV, p. 601

2 *Ibid.*; Banerjee, B. : *Begam Samru*, p. 23; Keene, H. G. : *Sindhia, otherwise Madhoji Patel*, p. 141

3 *Ibid.*, pp. 182-183, 187

4 Thornton, *op. cit.*, Vol. IV, p. 601; Nevill, *op. cit.*, p. 194

5 *Ibid.*

6 *Ibid.*

When in 1794 Mahadaji Sindhia died, the Sikhs beyond the Yamuna recommenced their raids. They drove out the Maratha garrison from Saharanpur, compelling them to take refuge in the fort of Jalalabad. The Maratha authorities then sent Lakwa Dada to take charge of the disturbed districts, who appointed George Thomas, the celebrated Irish adventurer, to guard the marches. This extraordinary man remained there for some time and co-operated with Bapu Sindhia who was, in 1796, appointed governor of Saharanpur and the country adjacent, which at this time yielded a revenue of ten lakhs of rupees.¹ The task before George Thomas was, however, rendered difficult by reason of the intrigues conducted by the local Sikh jagirdars with their kinsmen to the west. Yet, he distinguished himself in the reduction of Shamli which he took by storm, and then of Lakhnautia where the Turkmans under Bahramand Ali Khan were in a state of rebellion and had put up a stubborn resistance.² George Thomas subsequently defeated the Sikhs in four actions near Karnal, but, in 1797, left Saharanpur to push his fortunes in Haryana.³ In the meantime, Bapu Sindhia had driven the Sikhs from the northern parganas of doab, and even pushed his forces into their own country, which became for a time a scene of the same plunder and devastation with which they had so often laid waste the doab.⁴ From its strategic position on the old high road to the Punjab, the town of Chilkana, in pargana Sultanpur, was considered of some importance, and a garrison of troops was maintained here by the Begam Samru.⁵

In 1799, the district was held, as governor, by Imam Bakhsh Khan, a dependent of Lakwa Dada, and his diwan or agent was Shimbhunath, a local grain merchant of the Vaish caste, who took the field on behalf of Lakwa Dada against his rival, General Perron, the then commander of Aligarh. His troops were, however, corrupted by means of a large sum of money which Perron found means to distribute amongst them, and their leader, Shimbhunath, was obliged to yield up a portion of the districts he held to save the rest.⁶ In the following year, Perron left Delhi with a large force, in order to seize upon the remainder. He largely extended his possessions and followed up this success by defeating Shimbhunath and his Sikh allies in a sharp action at Khatauli in Muzaffarnagar district, early in 1800. As a result, Perron was able to compel Shimbhunath to leave the doab altogether, and take refuge with the Sikhs. Perron then resumed all the Sikh jagirs here, but he acquired little real hold on the district.⁷ As illustrative of the state of the country, the massacre of 500 of the Goshains

1 *Ibid.*; Atkinson, *op. cit.*, pp. 251-252

2 *Ibid.*, p. 252; Nevill, *op. cit.*, pp. 194, 270

3 *Ibid.*, p. 194; Atkinson, *op. cit.*, p. 252

4 *Ibid.*

5 Nevill, *op. cit.*, p. 222

6 *Ibid.*, p. 195; Atkinson, *op. cit.*, p. 252

7 *Ibid.*; Nevill, *op. cit.*, p. 195

near Hardwar by the Sikhs in 1796 may be mentioned.¹ In fact, the greater portion of the upper doab was still divided amongst the Sikh sirdars, ostensibly as jagir, but in reality in lieu of blackmail. The only portion of the district that enjoyed even a semblance of security was the strip of country on the east, stretching from Jwalapur to Bahsuma (in Meerut district), in which Ramdayal Singh, the Gujar raja of Landhaura, had assumed a semi-independent attitude.²

Ramdayal Singh particularly showed his power in 1801, when he received the thanks of the Maratha commander for crushing an insurrection headed by one Aizaz Khan at Bachaiti near Deoband. This Aizaz Khan was an impostor and adventurer who gave himself out as the true Ghulam Qadir, and had raised a somewhat serious insurrection in the district. The failure of his attempt was in a great measure due to the treachery of the Gujar who had joined him only to have an opportunity of more effectively looting, whichever side should prove victorious.³

Ramdayal Singh had in his possession, about this time, 794 villages and 36 hamlets. The remarkable growth of the estate during the preceding fifty years, that is, since the time of Manohar Singh who held only 505 villages and 31 hamlets illustrates the power of the Gujar, who in all places seemed to have derived more benefit than any other caste from the disturbed state of the country under the domination of the Rohillas and the Marathas. The Raja, as Ramdayal Singh was invariably styled, then paid a fixed annual revenue of Rs 1,11,597, which was confirmed to him for life by the British about three years later, his tenure being called a *muqarrari*.⁴ He died on 28 March, 1813.

The vigorous policy of the Marquis of Wellesley, the then governor-general of British India, enforced by the extraordinary military ability which he had at his disposal, ultimately left the Marathas no choice but submission. Lord Lake's achievements in this war, particularly the fall of Aligarh and the capture of Delhi, compelled Daulat Rao Sindhia to conclude with the British, on 30th of December 1803, the treaty of Surji Arjangaon. Consequently the area covered by the present Saharanpur district with the rest of the doab passed, at least nominally, into the hands of the British, this entire area being ceded to them by the Sindhia under that treaty.⁵

Immediately after the battle near Delhi on the 11th of September, a British force, under Colonel Burn, had started from Delhi for Saharanpur, but had hardly reached the place when news arrived of a threatened Sikh invasion. A party was despatched under lieutenant Birch to watch the

1 *Ibid.*, p. 255; Atkinson, *op. cit.*, p. 252

2 *Ibid.*

3 *Ibid.*; Nevill, *op. cit.*, p. 195

4 *Ibid.*, p. 117

5 *Ibid.*, p. 195; Thornton, *op. cit.*, Vol. IV, p. 601; Atkinson, *op. cit.*, p. 252

fords of the Yamuna, and an urgent requisition for assistance was sent to Delhi. This resulted in the arrival of Col. James Skinner, with a regiment of cavalry, and crossing the Yamuna he fell upon the Sikhs unawares and utterly routed them.¹

For a time things appeared to be quiet, as the Sikh sirdars had tendered their submission, but soon after the British troops had to be recalled from Saharanpur to aid in the defence of Delhi, then threatened by Harnath, the adopted son of the Holkar, Maratha chief of Indore. The country at once rose against the British, stimulated by the report of this Maratha inroad.² At the same time, in October, 1804, a Sikh invasion, the thirteenth in succession, took place, under Rai Singh of Jagadhri and Sher Singh of Burhiya, who crossed the Yamuna at Rajghat. Proceeding by way of Damjhera, Sultanpur and Chilkana, where a feeble resistance was offered by the Saiyids, they marched on Saharanpur, ravaging the district, while Guthrie, the collector, remained shut up in the Qila Ahmadabadi, a fort built by Ghulam Qadir, whither he had taken refuge.³

When news of these happenings reached Delhi, Col. Burn hastened northwards with two battalions of infantry and six guns. Near Kandhla (in district Muzaffarnagar) he was overtaken by a large force of cavalry belonging to the Holkar and was compelled to shut himself up in the fort at Shamli, where he defended himself desperately till relieved by Lord Lake on the 3rd of November. The Marathas now departed southwards by way of Meerut, and Col. Burn continued his march to Khatauli where he was joined by Guthrie who had been rescued from Saharanpur by a regiment of the Begum Samru.⁴

By this time the Sikhs had extended their raids beyond the borders of this district into that of Muzaffarnagar, but were ejected from that region by the advancing column of the British. They then united their forces and took up a strong position at Charaon, on the banks of the Hindan, some 12 km. west of Deoband. Here their army was swelled by large numbers of Gujars and Rangars from all parts of the district, awaiting the attack from the British. On the 24th of November a fight, celebrated in local tradition, took place. The day, however, cannot be considered glorious to either side, for the British irregular cavalry displayed such cowardice that had the Sikhs shown more determination, the event would have been very doubtful. The indecisive victory that Col. Burn gained on this occasion was mainly due to the British artillery, an arm with which the Sikhs were not yet familiar. A cannon ball carried off Sher Singh's leg during the engagement, and his old uncle, Rai Singh, took him back to die at Burhiya. During this fight much

1 *Ibid.*, pp. 252-253; Nevill, *op. cit.*, p. 195

2 *Ibid.*; Atkinson, *op. cit.*, p. 253

3 *Ibid.*; Nevill, *op. cit.*, p. 195

4 *Ibid.*, pp. 195-196; Atkinson, *op. cit.*, p. 253

assistance was rendered to the British by Qazi Muhammad Ali of Manglaur and Sheikh Kalan of Rajupur.¹

In spite of their defeat, the Sikhs again invaded the district within a month, occupying Rampur, Thana Bhawan and the neighbourhood of Deoband. Col. Burn hastened from Saharanpur and on the 19th December made an unsuccessful attempt to surprise them at Tholu in pargana Gangoh, but hearing of his approach the Sikhs fled across the Yamuna by way of Chilkana. They were pursued as far as the river, but as Col. Burn received orders not to proceed further into the Punjab, he returned to the district headquarters. In the following January, several small parties of the Sikhs entered the district, but were ejected without much difficulty.²

The district was still in a very disturbed state, and matters were rendered worse, in February, 1805, by the irruption of Amir Khan Pindari, an ally of the Holkar. His wild Pindaris threatened to swoop across the Ganga opposite Muzaffarnagar, and some actually did venture over. Col. Burn, the British commandant in this region, received orders to watch the fords of the Ganga and prevent the invaders from crossing. Accordingly, he left Bhag Singh of Jhind and Bhai Lal Singh of Kaithaul in charge of Saharanpur, and marched by way of Jabarhera to Miranpur in district Muzaffarnagar, where he was joined by Guthrie, the collector. In March, Burn was summoned into Rohilkhand, but on the 9th of the month the Sikhs again rose, probably at the instigation of the Holkar, and a large force crossed the Yamuna to join Gurdatt Singh, the Sikh jagirdar of Jhinhana, who was threatening Kandhla. Guthrie was then in the small fort of Fazalgarh near Meerut with a small force, and could do nothing but resume the jagir of Gurdatt Singh and direct Ramdayal Singh of Landhaura and Muhamdi Khan of Marhal to guard Hardwar. On the 17th of March, the Sikhs attacked Thana Bhawan, but were repulsed with loss by the Qazi of that place. Negotiations were then opened, but the Sikh leaders still continued to plunder the country as far south as Meerut, burning the villages and the standing crops. On the 5th of April, therefore, Col. Burn crossed the Yamuna and attacked and captured Karnal. These energetic measures brought the Sikhs to their senses and effectually put an end to all further invasions by them. The district was finally cleared of them by the ejection of the Burhiya family from Ghaziuddinnagar near Saharanpur, to which they laid claim on the grounds of a permanent lease.³

Comparative tranquility prevailed down to the year 1813, when Ramdayal Singh, raja of Landhaura, died, and the settlement operations consequent upon the resumption of his enormous estates were attended by a Gujar rising, which was, however, quelled before it became serious.⁴

1 *Ibid.*; Nevill, *op. cit.*, p. 196

2 *Ibid.*

3 *Ibid.*, pp. 196-197; Atkinson, *op. cit.*, p. 153

4 *Ibid.*, pp. 253-254; Nevill, *op. cit.*, p. 197

The war of the British with the Gurkhas in 1814 did not affect the Saharanpur district, though an indirect result was the attachment to it of the district of Dehra Dun in 1817, which arrangement lasted till 1825 when the Dun area was assigned to Kumaun.¹ These territorial arrangements were made under Regulation IV of 1817.

In 1824, a variety of circumstances tended to cause a rising of a far more dangerous character than that of 1813. The principal leaders of the disturbance were two Gujars : Kalwa, a famous bandit who for years harassed the submontane tracts of Kumaun and Garhwal, and Bijai Singh, the talukdar of Kunja near Roorkee, who was related to the late raja Ramdayal Singh. The rendezvous of the insurgents was at the fort of Kunja, where they were collecting in rapidly increasing numbers, strange *to say, without the knowledge of the British authorities, when two daring exploits, the sack of the town of Bhagwanpur and the plunder of a strong treasure escort bringing in a large sum of money from the Jwalapur tahsil, led to the disclosure of their movements. Grindall, the then magistrate of Saharanpur, obtaining a reinforcement of the Gurkhas under the command of Capt. Young of the Sirmor battalion, at once attacked them in company with Shore, his joint magistrate. A stubborn fight ensued, lasting for a whole day and ending in the total discomfiture of the rebels, who lost nearly two hundred killed and wounded, among the former being their two leaders. The enterprise thus nipped in the bud was no petty undertaking of ordinary marauders. It had been planned on a grand scale, and large enforcements were coming to Bijai Singh's assistance from this as well as other districts, when the unexpected fall of Kunja and the death of the leading characters made the whole conspiracy to throw out the British collapse.²

In 1847, Thomason, the lieutenant-governor of the province, founded the famous Thomason Engineering College at Roorkee³, and in *saka* 1770 (A.D. 1848), a fine big metal bell was presented by the king of Nepal to the famous Daksheshwar temple at Kankhal.⁴ A few years later Thornton, speaking of the town of Saharanpur, wrote (its) "Immediate environs are rendered pleasing by numerous groves of mangoes and palms, and inclosures of cactus and euphorbia. Altogether the scene displays the results of care and intelligence not usual in this part of India; and those agreeable features, with the dwellings of British residents arranged about the town, give the place a European air"⁵ and an European described it as one of the handsomest English stations in India.⁶ By this time had been laid down here the celebrated botanic garden which belonged to the East India Company, and was arranged and matured by two eminent botanists, Dr Royale and

1 *Ibid.*

2 *Ibid.*, pp. 197-198 ; Atkinson, *op. cit.*, p. 234

3 *Ibid.*, p. 322

4 Fuhrer, *op. cit.*, p. 16

5 Thornton, *op. cit.*, Vol. IV, p. 601

6 *Ibid.*

Dr Falconer. It was claimed that here in one place were 'collected and naturalised in the open air the various fruit trees of very different countries, as of India, China, Cabul, Europe and America'.¹ In 1852, the headquarters of the Ganga canal workshops and the iron foundry were established at Roorkee,² and in 1854 the canal itself was opened by Col. Sir Proby Cautley, its chief architect.³

There is practically nothing of note in the political history of the district till the outbreak of the freedom struggle, in 1857. The district was at that time in the charge of R. Spankie, the magistrate, with H. D. Robertson as joint magistrate G. W. Colledge as assistant. There were also present in the station several other Europeans belonging to the civil service, the collector's establishment or to the canal or stud departments.⁴ What a European resident of the place wrote at the time indicates the anxieties felt by the British at Saharanpur during the troublous month of May, 1857: "Early in the month of May, it became a subject of general remark with us, that the sepoys on duty at this station had thrown off their customary quiet and respectful behaviour, and had become forward, if not insolent; they paraded the public roads in parties, scarcely deigning to move to one side for a passing carriage, and singing at the highest pitch of their unmelodious voices, heedless of who heard them.....But on Monday, the 11th May, this infatuation which we shared in common with the vast majority of our countrymen, received a violent almost a death blow. A hurried pencil message arrived from Meerut—'The sepoys are in open mutiny! Meerut is in flames'...."⁵

On the 13th all the European women and children in the station were sent to the hills, and not too soon, for the day after came news of the massacre at Delhi. Extra police including 50 sawars was raised, and the Europeans established themselves as a regular garrison in the magistrate's house. Only 85 men of 29th Bangal Native Infantry were, however stationed at Saharanpur. Shortly afterwards more bad tidings came from Delhi and Muzaffarnagar. The district soon rose against the British, the Gujars and Rangars especially making themselves notorious for their turbulence. In this general outbreak, ancient feuds were renewed; village plundered village; bankers were robbed of their property, or had to pay blackmail for its protection; and in many cases debtors took advantage of the general anarchy to obtain from the money-lenders their account books and bonds.⁶

The local officers did their best to put down the disturbances in their earliest stage, instituted punitive measures and sent out parties to disperse

1 *Ibid*, pp. 601-602

2 Nevill, *op cit.*, p. 322

3 *Supplementary Notes and Statistics to Vol. II of the District Gazetteers of the United Provinces of Agra and Oudh*, C. Vol., (Allahabad, 1924), p. 2

4 Atkinson, *op. cit.*, p. 254; Nevill, *op. cit.*, p. 198

5 Rizvi, S.A.A. (Ed.): *Freedom Struggle in Uttar Pradesh*, Vol. V, p. 93

6 *Ibid.*, pp. 94-95; Nevill, *op. cit.*, p. 198; Atkinson, *op. cit.*, pp. 254-255

the assemblies. On the 21st May, the revolutionaries were active in Malhaipur, Gurhaw, Nague, Kunkuri and Phoraur villages. On the following day a demonstration was made by mounted police under Robertson along the Roorkee or Mohand road, in consequence of the reported disturbances on that route. As a result, 28 men were captured and sent into headquarters under an escort provided by the zamindars of Haraura. Robertson then attacked the village of Gokulwala with the aid of the zamindars of Kheri and other villages, and seized the owners of that village, who had been suspected of disloyalty.¹

At Saharanpur the *kotwal* (head police officer of the city), whilst appearing faithful, was in reality stirring up the people to disaffection. The shopkeepers shut up their shops, and, burying their valuables, prepared for the worst. Confidence was, however, restored for a time by the arrival of a British cavalry and infantry force from Jagadhri in district Ambala.²

Taking advantage of their presence, on the 26th of May, Robertson with a small force went to Deoband where the inhabitants had all along been peaceful and remained so throughout the disturbances. The next day he proceeded to the three Gujar villages of Babupur, Fatehpur and Sanpala Bakal, where a smart action ensued, the Gujar being over powered and their villages burnt. He then intended to tackle with other lawless villages to the west, but hearing that preparations had been made to resist him in the Katha tract, he refused to risk the chance of a reverse at so critical a period, and instead marched to Nagal. On the 30th of May, Spankie, joined by Robertson and his force, went to Manglaur in order to make a raid on Manakpur, then held by one Umrao Singh, who had set himself up as raja and was levying contributions from the villagers. The village was taken and burned, but an attempt to capture Umrao Singh failed as he and his followers succeeded in effecting their escape.³

On the 2nd of June, a portion of the Indian infantry at Saharanpur rose in arms, and fired upon their officers, but none was killed ; and were it not for the arrival, the next day, of the Gurkha soldiery under Major Bagott from Dehra Dun, it would have fared ill with the Europeans at Saharanpur. By this time the British had lost all confidence in the troops, especially as the Indian sepoys at Moradabad had also revolted. The Gurkhas were at once employed in dispersing a body of Gujars who had assembled to attack the treasury. On the 5th, Robertson went to Roorkee after visiting some refractory villages and punishing the inhabitants. On the 16th, a fresh danger to the British was threatened by the irruption, in the south of the district, of a body of freedom fighters, 300 strong, from Jullundur, who had

1 *Ibid.*, p. 255; Nevill, *op. cit.*, pp. 198-199; *op. cit.*, pp. 94-95

2 *Ibid.*, pp. 95-96; Atkinson, *op. cit.*, p. 255; Nevill, *op. cit.*, p. 199

3 *Ibid.*, Atkinson, *op. cit.*, p. 255; Rizvi, *op. cit.*, p. 96

crossed the Yamuna. The Gurkhas, with two British officers were sent to intercept them, and the revolutionaries hastened through the district, covering the distance from the hills to the southern border in thirty hours. Two days later, a second party went out with a similar object, but were unable to catch the flying sepoys.¹

On the 20th June, news came of a Gujar attack on Nakur, and Robertson promptly marched thither with a force of the Gurkhas and Patiala horsemen, arriving in time to find the tahsil and police station in flames, and the whole town sacked and gutted, except the Muslim quarter. The Gujarars had also plundered the town of Sarsawa. The British force, on scouring the country, came across a large body of men and women carrying off the plunder to Fatehpur. The village was burnt by the British, but the neighbourhood had now risen against them, and they had to send for help and take up a position for the night. They were relieved on the 22nd by Boistragon and his Gurkhas, on whose arrival the action ensued, the freedom fighters being driven in flight with heavy loss. The British burnt down four villages, and the next day Sandauli and Randhawa were similarly treated. The column then went on to Budha Kheri, the stronghold of the Gujarars, which was demolished, and from there to Gangoh where they made a halt. On the 26th, the British set out to crush the Rangars of the *khadar*, where the freedom fighters had gathered in a large number at Umapur and Manpur. Boistragon attacked them from both flanks, driving them in flight with great slaughter, and pursuing them as far as Konda where a number of the fugitives were intercepted. In this way, Lakhnautia and Gangoh missed the Rangars who had planned to visit these places. It was observed that the rising was due mainly to the bigoted Muslims, especially those of Nakur and the neighbourhood. Both at Nakur and Sarsawa, the Muslims took no part in the resistance to the Gujarars offered by the other inhabitants. British troops returned to Saharanpur on the 18th of June, after visiting Rampur which had been threatened by revolutionaries.²

In the meantime on receiving news of the Meerut outbreak on the 12th of May, Col. Baird Smith, who was then superintendent of irrigation at Roorkee, made arrangements for the defence of the place, and selected the workshops of the canal as the most suitable refuge. On the 14th, considerable alarm was caused by a fire at the engineering college there, and as the circumstance was considered to be due to deliberate mischief, a guard was formed of the soldier students, and a system of patrols instituted for the whole station. The next day Col. Baird Smith was appointed to the military command, and on the 16th the sepoys were given charge of the college and all the Europeans were moved into the workshops

¹ *Ibid.*, pp. 96-97; Nevill, *op. cit.*, pp. 199-200; Atkinson, *op. cit.*, p. 255

² Nevill, *op. cit.*, p. 200

which had been fortified and entrenched. On the 18th, one of the Sapper companies was sent away to Delhi on a requisition from the commander-in-chief; but it had not proceeded beyond Sikandarpur when the men revolted and insisted on returning to Roorkee, where the remainder were in a state of the greatest excitement on hearing news of the rising and punishment of their comrades at Meerut. The troops returned during the night, and the officers were escorted to the workshops. The troops then made off towards the Ganga, though about fifty of them, including their officers, remained at their posts.¹

In this manner the real crisis at Roorkee passed, and Baird Smith was now able to direct his attention to the surrounding villages and the protection of the Ganga canal, which was exposed to the attacks of the Gujars. Parties were sent out in different directions, but few collisions with the freedom fighters occurred. His attitude also encouraged the people, and the residents of Kankhal and Jwalapur successfully repelled attacks on the 21st and 26th, while on the latter occasion the canal subordinates made a successful defence of the headworks of the canal. The next day Baird Smith went to Hardwar from where he sent a party down the canal to Jauli and thence to Muzaffarnagar. On the 11th of June, the Europeans from Bijnor arrived in Roorkee, but as three of them had been intercepted by the nawab of Najibabad, a party was sent to attempt their rescue. It crossed the Ganga at Hardwar and reached Najibabad on the 15th, where the nawab handed over the fugitives, even providing carriage for them. Baird Smith in the meantime was perfecting his defences, casting guns, raising irregular troops, and even editing a newspaper, *The Roorkee Garrison Gazette*. He obtained funds by collecting revenue in the Roorkee tahsil, the inhabitants yielding to his demands in the presence of an armed detachment. On the 22nd a party marched to Manglaur where it succeeded in dispersing a band of Gujars intent on capturing that town. On the 26th of June, Baird Smith was summoned to Delhi, for which he set off, leaving Captain Read in command of the station.²

At Saharanpur, the next incident of importance was the defection of the remainder of the Indian infantry there on the 9th of July. The British took the incident rather as a relief than otherwise, since the men left their posts hurriedly and departed without doing any damage to them or even attempting to touch the treasury.³

By this time the Bhyroop Banjaras in the Ganga *khadar* had risen against the British, and about a thousand of them had assembled at the village of Fathua, between Sultanpur Kunari and Asafgarh in pargana

1 *Ibid.*, pp. 201-202; Rizvi, *op. cit.*, pp. 100—102

2 *Ibid.*, p. 152; Nevill, *op. cit.*, p. 202

3 *Ibid.*, pp. 200-201; Atkinson, *op. cit.*, p. 255

Jwalapur of tahsil Roorkee. There they had entrenched themselves by making a breastwork, some six feet high, of their *gonds* filled with sand and backed by timbers, and possessed 250 matchlocks and two *zamboors* (wall pieces).¹ It was on this account that Robertson had left Saharanpur on the 11th of July and came to Roorkee. From there, accompanied by Capt. Read, he proceeded to Jwalapur, and thence on the 15th to Rani Mirza, only to find every village in the tract shaken by the uprising. He crossed the Banganga on the 17th and defeated the Banjaras at Fathua, many of whom escaped to an island on the Ganga.²

The British force returned, on the 19th of July, to Roorkee, and from there, with fresh reinforcements, proceeded to Deoband which had been again attacked by the Gujars from the neighbourhood and from village Pur in district Muzaffarnagar. The British reached the town on the 22nd and found that about one-third of it had already capitulated. Consequently, severe punishment was inflicted on the suspects, but this work was stopped by the receipt, on the 25th, of orders from Saharanpur.³

In fact, Robertson had been recalled to Saharanpur in order to defend the city against an attack of the Gujars, Rangars and the Pundir Rajputs of the Katha tract, who, aided by the lower sections of the Muslim population, proposed an attack upon the European quarters and the jail. The jail guard was, therefore, disarmed and replaced by the Gurkhas, whilst the arrival of two guns from Meerut and 40 Europeans from Landour frustrated the plans of the revolutionaries and the festival of Muharram, which fell at this time, was passed without any disturbance.⁴ The *kotwal* of Saharanpur, who had long been suspected, was transferred to Nakur and from there, a little later, deported to Ambala. His escort surprised some Gujars near Sadauli and captured the principal leader of the Gujar insurrectionists of these parts.⁵ It may also be said that the people of the towns were occasionally able to do something to protect themselves; thus the Muslims of Deoband and the people of Kankhal repulsed the attacks made on their towns.⁶

By the end of 1857, order had begun to be gradually restored in the district, revenue began to be collected, garrison was strengthened by the arrival of the Punjab irregular cavalry, and it was even found possible to send reinforcements into the Muzaffarnagar district. Much yet remained to be done but the task of the British authorities became easier as disarmament was steadily effected.⁷

1 Rizvi, *op. cit.*, pp. 151-152

2 Atkinson, *op. cit.*, p. 255; Nevill, *op. cit.*, pp. 202-203

3 *Ibid.*, p. 203; Atkinson, *op. cit.*, p. 255

4 *Ibid.*; Nevill, *op. cit.*, p. 203

5 *Ibid.*

6 Atkinson, *op. cit.*, pp. 255-256

7 *Ibid.*, p. 256; Nevill, *op. cit.*, p. 203

Still much uneasiness was caused by the raids of the Rohilla Pathans from Bijnor, in one of which a police-station was burnt down, and some horses of the irregular cavalry were carried off. They held undisputed control of the country beyond the Ganga, and their power threatened the safety of the district.¹ On the 8th of January, 1858, reports came into Roorkee from all parts of the district that a large force, headed by the nawab of Najibabad, had crossed the Ganga, fallen upon the towns of Kankhal, Jwalapur and Hardwar, destroyed government property at Mayapur, and proclaimed these parts as having been conquered by the aforesaid nawab.² They reached as far as Bahadurabad unopposed, with the intention to occupy Roorkee. A British force under Boisragon, therefore, immediately set out from Roorkee for Mayapur which place it reached on the morning of the 9th. There Boisragon discovered a large body of the freedom fighters encamped about 5 km. below Kankhal, on the opposite side of the Ganga. Soon after the latter crossed the river near Kankhal, but Boisragon was ready for them in the town. Promptly attacking them so as to prevent their access to Jwalapur, he drove them headlong to the south and sent his cavalry in pursuit. Many attempted to recross the river, but their flight was cut off by the diversion of the entire canal supply into the stream and numbers of them were drowned. In the following months troops were sent from various quarters to concentrate on Roorkee, for the formation of a brigade intended to operate in Rohilkhand, which left Roorkee and crossed the Ganga at Hardwar on 17th April, 1858.³

Thus ends the story of the struggle of 1857, so far as the district of Saharanpur is concerned. At first every thing pointed to a rising against British rule, almost as serious as in other parts of Uttar Pradesh. As Spankie, the then collector of the district, wrote, "The people were civil and respectful. But in point of fact there can be no confidence placed in the demeanour and bearing of the people. They would always be respectful and submissive until it is in their power to be otherwise. The people of this district, and in all other parts of the country, I suppose, have no sympathy with Government, British or native. Separate castes and communities have separate ends and desires to attain, and the weakness of Government is their strength. Revenge and loot, in the first instance, led the agricultural communities astray. The burning of records, as in tahsil Nakur, was the crowning result of a determination to have no obligations towards anyone. The common brotherhood of the Muhammadans is a different thing; and I think it would be impossible to deny that they were heart and soul against us. They had everything to gain and little to lose as a general rule. They were in arms against the excesses of the Gujars simply because

1 *Ibid.*; Atkinson, *op. cit.*, p. 256

2 Rizvi, *op. cit.*, p. 153

3 *Ibid.* pp. 154-159; Atkinson, *op. cit.*, p. 256; Nevill, *op. cit.*, pp. 203-204

their own time had not come. These Gujars and others were out for a temporary gain, and to make the best of the present. The moment they found their's a losing game, they stopped it; and they bowed to the strong hand as long as it is strong. The Muhammadan population is ever against us."¹ The *kotwal* of Saharanpur, a Muslim, was executed, a considerable number of persons were hanged from wayside trees, rebel villages were destroyed and burnt down, and exceedingly severe punishment was meted out to many whose escape by appeal to higher courts was also prevented. It is also stated that there was never much loss of the government revenue, and that agricultural operations went on much as usual.² In the Roorkee tahsil, the Raos (Muslims) of Jwalapur and other Muslims came under grave suspicion, but the disarmament of the inhabitants of Kankhal, Hardwar and Jwalapur removed all cause for uneasiness to the authorities.³ On the whole, the wild country in the south of pargana Jwalapur, the *khadars* of the great rivers, the tracts near the Katha, and the villages lying amid the Gujar colonies, suffered most at the hands of the British; and the principal standard bearers of the revolution were the Gujars, Rangars (Muslim Rajputs), Pundir Rajputs of the Katha tract, Banjaras, and the lower sections of the Muslim population in the towns.⁴

Some of those who offered their help and remained faithful to the British obtained the title of Rao and the grant of villages revenue-free for life. Rewards of land were also given to many. Money rewards and commendatory *parwanas* were given to several subordinate officials of the canal department and free water for a year was allowed to the villages—the inhabitants of which had protected the works on the eastern Yamuna canal.⁵ And, by the beginning of February, 1858, the district returned to its normal state and British rule was firmly re-established there.

An era of administrative reforms, revenue settlements, improvement in educational and medical facilities, local self-government, and a general and effective consolidation of their hold on the district was started by the British authorities. A general awakening and interest in public life and social reforms began also to be evinced in the advanced sections of the inhabitants. Boards were established at Manglaur and Roorkee in 1860 and 1884 respectively. In 1864, the railway line from Saharanpur to Delhi was opened, and in 1878 A. J. Sladen, the then collector, started holding the annual district exhibition which, however, was very irregularly held till 1922. It was also during the last quarter of the 19th century that the district came under the impact of the reformist Arya Samaj movement of Swami Daya Nand. In 1899, the district suffered from a severe famine.

1 Atkinson, *op. cit.*, p. 256

2 *Ibid.*

3 *Ibid.*, pp. 256-257

4 *Ibid.*, p. 257

5 Nevill, *op. cit.*, p. 204

The establishment of the Gurukula Kangri at Hardwar in 1900 marked in birth of an institution, which was to develop in subsequent years into a prominent centre of Oriental studies (based on ancient Indian culture) and also a centre for the various movements launched by the Indian National Congress in the district.

The need to reorganise the police had been felt for sometime and on 1st March, 1905, the municipal police was merged with the provincial police.

As a result of the partition of Bengal by Lord Curzon, the viceroy, and the commencement of the Swadeshi movement, the Indian National Congress, in its Calcutta session of 1906, passed a resolution asking Indians to use goods made in India, and the people of the district also responded to the call. The same year, the Prince of Wales, later H. M. George V, visited the canal foundry at Roorkee. The district exhibition of 1913, which was held after a lapse of about 27 years, was opened by Sir James Meston, the lieutenant-governor of the United Provinces.

When, about this time, the construction of the new headworks of the Ganga canal started at Bhimghoda in Hardwar itself, an agitation began among the Hindu community against the alleged impairment of the sanctity of the holy river by the projected fettering of its flow, especially to the scared Har-ki-Pairi pool. It became evident that Hindu religious sentiment all over India was seriously concerned. Steps were, therefore, taken by the governments of India and the United Provinces to meet this objection, and first in 1914 and then in October 1916, the viceroy and the lieutenant-governor visited the site. In the meantime, the duodecennial Kumbh fair had taken place in April, 1915. The authorities issued instructions intended to secure an adequate flow of the river to the sacred spot mentioned above without its restraint by engineering works. Even this step failed to allay uneasiness among the Hindus, hence a further conference, headed by Sir James Meston, the lieutenant-governor, was held at Hardwar in December, 1916, at which the maharajas of Jaipur, Bikaner, Alwar, Gwalior, Benares and Darbhanga and other prominent Hindus were also consulted, resulting in an amicable settlement.

The First World War (1914—18) was at this time at its height, and the authorities had but little thought for anything else. Soon after, however, the district shared indignation with the rest of patriotic India against the Rowlatt Act of 1919, which the Jallianwala Bagh massacre of 13th April, 1919, flared up. Public meetings were banned and other precautionary measures taken. On October 17, the same year, complete hartal was observed in the city and bigger towns to observe the Khilafat day.

The Amritsar (Jallianwala Bagh) tragedy and the Khilafat movement transformed the Indian National Congress into an active organisation, and facilitated the emergence of Mahatma Gandhi on the Indian political scene

as the unquestioned leader of the fight for freedom. His non-violent struggle of passive resistance against British rule, consisted in the triple boycott of the impending elections under the Government of India Act of 1919, of government schools and colleges, and of the law courts. Many men and women in the district took active part in this non-co-operation movement, vowed to wear hand-spun and hand-woven khadi, started the practice of plying spinning wheels, bore *lathi*-charges and courted arrest. Consequent upon the Chauri Chaura incident the movement was, however, withdrawn, but was soon after followed by the no-rent campaign, an agrarian agitation. The authorities resorted to ruthless measures in order to suppress it.

Meanwhile the Congress and Khilafat movements continued side by side in the district. Numerous Congress subcommittees were formed, the district Khilafat committee electing Khalil-ur-Rahman, a local citizen, as its president in 1922. The rift between the moderate and extremist factions of the non-co-operation movement was apparently conspicuous by this time. The latter took out processions and claimed to have inaugurated the boycott of government jobs, foreign goods and other governmental activities in the district.

The non-co-operation movement, took the form of a no-rent campaign started under the guidance and auspices of Jawaharlal Nehru and Gandhiji. The people of this district in response to their call, stood together against the excess levy realised from the cultivators. Even the Khilafat committee of the district welcomed this move and, at a secret meeting held at Saharanpur on 24th January, 1923, proposals to enlist popular support in various localities of the district were favourably viewed. It was decided to send men all over the district to prepare tenants for refusal to pay taxes of all description. On 18th March, 1923, the people of Saharanpur observed Gandhi Day as a mark of protest against the detention of Mahatma Gandhi by the British. The occasion was marked by large processions and crowded meetings. The call for a complete hartal met with a very good response at Hardwar where the non-co-operators succeeded in getting all the shops closed. The wearing of *khaddar* and putting on of Gandhi caps became a prominent feature of the period. A few days later, Motilal Nehru visited Saharanpur and addressed a gathering of 3,000 people. He appealed for liberal donations to the Congress fund and exhorted the people to support the national struggle. On 25th June, 1923, Jawaharlal Nehru visited the district and called for the people's support to continue the struggle against foreign yoke.

By 1924, the no-rent campaign (which was initially organised on an agrarian basis) in Saharanpur was headed for a serious turn; a two day meeting of the *kisan-sabha* being held on 29th and 30th November at which Purushottam Das Tandon, highlighted the miserable condition of the tenant cultivators. The silver jubilee celebrations of the Gurukul Kangri in March, 1927, was the occasion for visits by eminent national

leaders—Mahatma Gandhi, Kasturba, Miss Slade (an European lady with sympathetic leanings towards the national movement in India), Rajendra Prasad and Madan Mohan Malaviya. They particularly appealed to the youth to prepare for great sacrifices for the sake of nation building. Madan Mohan Malaviya advocated the use of the *charkha* (spinning wheel), *khadi* and *swadeshi* (Indian made goods) in keeping with the view expounded by Gandhiji. The Congress tri-colour flag was unfurled by Miss Slade at the *khadi* exhibition organised during this occasion, the incident being somewhat marred by the protests of one Swami Prakashanand who organised an agitation on grounds of her not being the right person to perform the ceremony. The exhibition was also later visited by Gandhiji, Kasturba and Madan Mohan Malaviya.

When the Simon Commission visited the country in 1928, black flag demonstrations were organised in the district in response to the call given by nationalist and local leaders such as Mangal Singh (a member of the Legislative Council), who at a largely attended peasant meeting held in Gangoh on 20th October, 1928, appealed for its boycott. The news of the arrest and conviction of Bhagat Singh and Batukeshwar Datt caused widespread feelings of shock and grief among the people of Saharanpur as elsewhere in the country, and large processions taken out on 21st July, 1929, marked the Bhagat Singh Day. Again in August, 1929, Tilak Day was observed at the Ramlila grounds at Saharanpur to commemorate the valuable services and sacrifices rendered by Bal Gangadhar Tilak, the eminent nationalist leader. In September, large processions with pronounced nationalistic leanings were taken out at Hardwar and other places of the district, to mourn the death of Jitendra Nath Das.

When Gandhiji, accompanied by Purushottam Das Tandon revisited the district on 14th October, 1929, a sizeable crowd welcomed them at the Hardwar railway station. The same day he addressed a crowd of 4,000 people at Hardwar and stressed the need for perseverance and adherence to the principles of the non-violent struggle for freedom.

Both the Hindus and Muslims of the district unitedly pledged to support the civil disobedience movement (1930–34) launched by Gandhiji. Hundreds of Congress volunteers toured the district to spread the message of salt *satyagraha* and civil disobedience, and the Muslim leaders of Saharanpur organised a meeting on 15th March, 1930, wherein it was decided to induce the Muslims of the district to take part in the fight for freedom. The salt *satyagraha* gained momentum in the district, contraband salt being manufactured at a number of places from clay. Large processions paraded the streets of Saharanpur, Rampur (Maniharan) and Hardwar in defiance of the Salt Act resulting in the arrest of a large number of persons.

Meanwhile, on 20th April, 1930, the staff and students of the Gurukul Kangri convened a meeting at Hardwar which was attended by 500 persons. Speeches were delivered on the subject of freedom, sacrifice and boycott of foreign cloth and liquor. The next day a procession started from Hardwar, arriving at Roorkee the following evening. At a meeting held there the same day, small packets of salt were sold among the people in violation of the Salt Act. Between 27th and 29th April, 1930, large processions were taken out in different parts of the district, urging contravention of the Salt Act, and on April 30, salt made from clay was sold for Rs 50. Gandhiji's arrest during this period led to a complete hartal in the cities of Saharanpur, Rampur and Hardwar.

In response to the call for Swadeshi picketing was undertaken by volunteers, at whose instance, the cloth merchants at Hardwar agreed to their shops being sealed. Gandhiji's call in '*Young India*' (10th April, 1930), to the women of India did not go unheeded in the district and women volunteers organised large meetings at Deoband where large numbers of female volunteers picketed shops selling foreign liquor and cloth. Nine Jain temples at Saharanpur were picketed in June, 1930 by women who declared that only those wearing *khaddar* would be allowed entrance to these places. As a token of their gratitude to the martyrs who suffered brutalities at the hands of the British and laid down their lives in the cause of India's struggle for independence at Peshawar, the people observed the 'Peshawar Day' on 20th June, 1930 at Saharanpur. On 27th September, 1930, a gathering of 4,000 persons assembled at Roorkee to attend a conference organised by the Gurukula volunteers as part of the civil disobedience movement. The authorities meanwhile promulgated orders under section 144 Cr. P. C., and asked the people to disperse. The latter had hardly begun complying with these instructions, when the arrival of a Gujar zamindar, who urged them to offer *satyagraha*, caused the crowd to retrace its steps. Subsequently, a force of about 100 policemen charged the assemblage, which retaliated by throwing brick-bats. However, the arrival of a party of armed police forced the people to retreat, leaving behind a number of injured. The Congress camp was raided the next morning by the authorities and the entire stock of stores and supplies was confiscated. Both the agitators and the police received injuries in the melee, a number of volunteers being arrested. The arrest and conviction of Jawaharlal Nehru on 16th November, 1930, at Allahabad led to spurt in Congress activities and demonstrations throughout the district.

On 7th April, 1931, a huge crowd went to meet Gandhiji who was passing through the district. He, however, did not address the gathering on account of indisposition. Khan Abdul Ghaffar Khan (Frontier Gandhi) who was accompanying him, addressed them. A combined meeting of the Congress and Jamait-ul-ulema, having an attendance of nearly 4,000 persons, was asked to carry out the struggle jointly, the Congress being declared a unified

body which was to be strengthened by the joint efforts of both the Hindus and Muslims. The Khan also advocated spreading of these ideas among Muslim *pardah* women.

The Naujawan Bharat Sabha Conference held at Saharanpur on 20th September, 1931, was highlighted by a stirring description of the circumstances of Bhagat Singh's execution in a speech delivered by Kishan Singh, father of the martyr, who presided over this meeting. He exhorted the gathering, comprising nearly 2,000 persons, to sacrifice even their lives for the sake of the nation. The district was visited by Purushottam Das Tandon in November, 1931 who explained the circumstances leading to the failure of the Round Table Conference in London and pleaded for the continuance of the freedom struggle with the help of the people all over the country. Two years later in April, he again came to the district and stressed on the speedy removal of untouchability. The movement continued unabated till 1934, when it was withdrawn by Gandhiji.

Popular enthusiasm reached a high water mark in 1936, when Jawaharlal Nehru visited Saharanpur on 11th September. Donations to the Congress funds were liberally given and his speeches, contained an unmistakable warning of the oncoming tide of events which, engendered by the feelings of the masses, tended to sweep the entire country in its wake. In 1937, elections for the provincial legislature were conducted under the Government of India Act, 1935. With the outbreak of the Second World War in 1939 the Congress ministry in the province resigned, refusing to support the government in its war effort unless complete political freedom was granted to the country after the war. The people of the district started a campaign against the war fund collections, and a year later, under the direction of Mahatma Gandhi, Individual Satyagraha by a number of persons was launched in public places, resulting in the arrest and summary conviction of hundreds of people who were thrown into jail. And, when, in August, 1942, after a wholesale arrest of all the national leaders, the 'Quit India' movement commenced, the patriots in the district took an active part in it and heavily suffered for their patriotism.

At last, the long fight for freedom bore fruit, and the country was declared independent of foreign rule on the 15th of August, 1947. The district did not escape serious communal riots which occurred in the wake of the partition of the country, but within a short time order was restored by the national government.

CHAPTER III

PEOPLE

GROWTH OF POPULATION

The earliest attempt at an enumeration of the inhabitants of the Saharanpur district, of which records remain, was that made in 1847 when its population is said to have totalled 5,47,353 persons. Of these, Hindus numbered 3,36,514 and Muslims 2,10,839. No account was taken of other religious communities, nor was the sex break-up given. The number of inhabited villages, including towns, was 1,447, and the density of population arrived at was 253 persons per square mile. 1,370 villages contained less than a thousand inhabitants; the only places with a population of five thousand persons or over being Saharanpur, Deoband, Jwalapur, Gangoh and Manglaur. The claim that the census 'was taken very correctly' is discredited by the very low figure of the density alone, since the district at that time was already in a highly developed state.

The inaccuracy of the foregoing enumeration was fully exposed by the census of 1853 at which greater care is said to have been taken. The total population returned was 8,01,325 souls, of whom 4,56,089 were males and 3,45,236 females. Hindus numbered 5,55,940 and the rest included Muslims and other communities not specified. There were 1,481 inhabited villages, including towns, and the density of population in the district was 370 persons to the square mile. 1,328 villages had a population of less than a thousand persons each. Apart from the five towns referred to above Roorkee, Kankhal, Ambahta, Rampur and Landhaura, registered so much rise as to return a population of five thousand persons or above in each case.

At the census of 1865 (Plowden's *Census Report*, Vol. I), the density increased to 389 and the population to 8,66,483, the females numbering 3,90,642. There were in the district 5,92,038 Hindus, and 2,74,445 others, including Muslims, Europeans and Eurasians. The number of inhabited sites had risen to 1,514, of which 9 were towns, each with a population exceeding 5,000, and 1,340 villages containing less than a thousand inhabitants each.

In spite of a famine and certain other retarding factors, the population of the district registered a further increase at the census of 1872, which gave a total of 8,84,017 persons, of whom 3,99,363 were females, the density averaging at 399 persons per square mile. There were in the district 1,04,422 Hindus and 2,79,595 others including Muslims and

Christians. The number of inhabited towns and villages was 1,736, of which 1,569 had a population of less than 1,000 each, 128 between one and two thousand, and the nine towns possessed more than 5,000 inhabitants each.

The next decennial census of 1881 gave the population as 9,79,544 souls. The increase of 95,527 persons, which was more than that in any of the other western districts of the province, was due partly to the general development of the district and partly to its comparative immunity during the famines of 1877 and 1878. The density had risen to 440.9 persons to the square mile, but the number of towns and villages had decreased to 1,605, of which 1,410 contained less than a thousand persons apiece, 146 between one and two thousand, and the nine towns above five thousand residents each.

During the next decade increase was maintained, but not at the same rate, in spite of the general prosperity during that period. Thus in 1891, there were 10,01,280 inhabitants in the district (of whom 4,60,929 were females) giving an average density of 446.5 persons to the square mile, a figure well above the general average for the province. There were 6,67,494 Hindus, 3,24,432 Muslims, and 9,354 others. The number of inhabited sites was 1,633, those with less than a thousand persons numbering 1,434, while the same nine towns possessed over 5,000 residents each.

The decennial growth of population in the Saharanpur district from 1901 to 1971, as per census records of 1971, is shown in the statement below :

Year	Persons	Decade variation	Percentage decade variation	Males	Females
1901	10,46,043	—	—	5,61,335	4,84,708
1911	9,87,207	— 58,836	— 5.62	5,41,586	4,45,621
1921	9,38,164	— 49,043	— 4.97	5,16,295	4,21,869
1931	10,44,794	+1,06,630	+11.37	5,74,290	4,70,504
1941	11,80,466	+1,35,672	+12.99	6,55,781	5,24,685
1951	13,53,636	+1,73,170	+14.67	7,43,174	6,10,462
1961	16,15,478	+2,61,842	+19.34	8,85,109	7,30,369
1971	20,54,834	+4,39,356	+27.20	11,28,485	9,26,349

A large number of deaths caused by fever and high mortality brought by fever, influenza and cholera account for the fall in population in the first and second decades of the century.

Thus, after a decline in the first two decades, the population has continually gained in numbers, the increase being the highest during the decade 1961—1971, when the population of the district rose by 4,39,356 persons, giving a percentage increase of 27·20, which was higher than the State average of 19·78 for that period. In 1961, the order of tahsils by population was Saharanpur, Roorkee, Deoband and Nakur, which remained intact in 1971 also. The largest population growth, during 1961—1971, has however, been noticed in tahsil Saharanpur, which was 31·4 per cent, the percentages of increase in tahsils Roorkee, Deoband and Nakur being 31·2, 19·6 and 17·1 respectively.

The population totals, computed on the basis of the census of 1971, gave the population of the district as 20,54,834 persons, of whom 11,28,485 were males and 9,26,349 females. The rural population was 15,72,027 and the urban 4,82,807.

The Central Statistical Organisation computed the area of this district (on 1-7-1971) as 5,526 sq. km.

The density of population in the district in 1971 was 382 persons per sq. km. which was higher than the State average of 300 persons per sq. km. and considerably higher than that in 1961 (which was 293). The most densely populated tahsil was Saharanpur, with a density of 385 persons per sq. km., followed by Deoband, Roorkee and Nakur, with densities of 403, 369 and 330 persons per sq. km., respectively. In the rural area it was 256 and in the urban 8,927 persons per sq. km. The highest rural density was 403 in tahsil Deoband. The following figures show the gradual and steady increase in the density since 1921 :

Year	Density (persons per sq. km.)
1921	176
1931	190
1941	220
1951	232
1961	293
1971	382

The increase between 1961—1971 has been mainly in the urban areas—from 5,118 to 8,927 per sq. km.

The district of Saharanpur has differed but little from other parts of the Meerut Division, in which it lies, in the relative position of the sexes, the

proportion of females having always been lower than that of males. In 1901, there were 864 females per 1,000 males but in 1911 the sex-ratio dropped to 823, further falling to 817 in 1921, and to 800 in 1941, but rising again to 821 in 1951 and to 825 in 1961. The figure at the 1971 census was 821, which is considerably lower than the sex-ratio of the entire State (879). The highest ratio (828) was in tahsil Nakur, and the lowest (802) in tahsil Roorkee.

Population by Tahsils

At the census of 1971, the district in all its four tahsils of Saharanpur, Nakur, Deoband and Roorkee, contained 1,688 inhabited and 481 uninhabited villages, and ten towns of which Saharanpur, Gangoh, Deoband, Roorkee, Manglaur and Hardwar were municipalities, Nakur and Rampur Maniharan were town areas and Ranipur was a notified area, and Roorkee cantonment board being tenth urban area. The tahsilwise break-up of rural and urban population was as given below :

Tahsil	Villages		Towns	Population		
	Uninhabited	Inhabited		Persons	Male	Female
Saharanpur						
Rural	135	514	—	4,29,841	2,34,767	1,95,074
Urban	—	—	1	2,25,396	1,23,027	1,02,369
Nakur						
Rural	135	412	—	3,21,486	1,76,159	1,45,327
Urban	—	—	2	32,670	17,506	15,164
Deoband						
Rural	96	329	—	3,33,647	1,93,581	1,60,066
Urban	—	—	2	51,191	28,040	23,151
Roorkee						
Rural	113	433	—	4,67,053	2,54,854	2,12,199
Urban	—	—	5	1,73,550	1,00,551	72,999
Total	481	1,688	10	18,81,284	11,28,485	9,26,349

Tahsilwise rural and urban population of the district in 1961 and 1971 has been given in Statement I at the end of the chapter.

Immigration and Emigration

The returns of the 1901 census showed that of the total number of inhabitants in the district, 92.94 per cent were born within its boundaries

and 7.06 per cent were immigrants. At the census of 1961, however, 87.7 per cent of the inhabitants were born within the district and 12.3 per cent outside it—7.0 per cent in other districts of Uttar Pradesh, 2.5 per cent in other parts of the Indian Union, and about the same percentage in countries outside India. Of those coming from other countries, the bulk, 38,486, had migrated from Pakistan, 1,525 from Nepal and 126 from elsewhere. The duration of residence in the district of 54.1 per cent of the immigrants was over ten years. As many as 77.4 per cent of the immigrants were residing in the rural areas and the rest in the urban. Again, of the total rural population, 92.6 per cent were born within the district, about 5.2 per cent in other districts of the State, 1.4 per cent in other parts of India and the rest elsewhere, the corresponding figures for the urban area being 71.1, 12.7, 6.2 and 9.7.

Of the immigrants from other States, 30,195 persons came from Punjab (including Haryana), 2,733 (males 1,241, females 1,492) from Delhi, 1,449 (males 742, females 707) from Rajasthan, 1,237 (males 870, females 367) from Bihar, 740 (males 535, females 205) from Madhya Pradesh, and 698 (males 383, females 315) from Himachal Pradesh. Those hailing from other districts of the State numbered 1.12,443 (of whom 36,117 were males and 76,326 females).

The preponderance of female immigrants (97,758) over male ones (51,737) seems largely to be due to marriage or migration as dependents of persons displaced from Pakistan. A number of residents of Hardwar and the neighbouring towns of Kankhal and Jwalapur represent those pilgrims, particularly old widowed women, who occasionally resorted to these holy places and ultimately chose to settle down there.

Figures of emigration from the district are not available, but a sizeable number of Muslims appear to have migrated to Pakistan as a result of the partition of the country. Some people leave the district in connection with studies, jobs or matrimony.

Displaced Persons

Consequent upon the partition of the country in 1947, about 65,684 displaced persons, particularly Hindus, Sikhs and Jains, migrated from Pakistan to this district. In 1961, those having come from Pakistan formed 96 per cent of the total number of immigrants in the district. About 54 per cent of these had been residing in the district for over ten years, and had apparently migrated prior to 1951, and the remainder thereafter. Suitable measures were taken to rehabilitate these displaced persons in agriculture, trade and industry, by advancing loans, granting licences for sale of certain controlled commodities, and providing them other facilities including the building of a number of shop-cum-houses which were sold to them against

cash payment or verified claims. They have all by now properly settled down and became part of the district population.

Distribution of Population

The distribution of the rural population among villages of different sizes, as in 1971, is given below :

Range of population	No. of inhabited villages	Persons	Male	Female	Percentage of rural population
1—199	219	22,320	12,326	9,994	1.41
200—499	382	1,34,335	73,315	61,020	8.54
500—999	543	3,94,545	2,15,332	1,79,213	25.08
1,000—1,999	388	5,40,996	2,95,973	2,45,023	34.47
2,000—4,999	143	3,96,302	2,16,462	1,79,840	25.20
5,000—9,999	13	83,529	45,953	37,576	5.31
Total	1,688	15,72,027	8,59,361	7,12,666	100.00

Thus, about 76.5 per cent of the population of the district was rural, living in its 1,688 inhabited villages. The average population per inhabited village was 931, as against 745 in 1961 and 625 in 1951. More than half the number of villages (931 or 55.1 per cent) were medium-sized, with population ranging from 500 to 2,000, the percentages of small-sized (with population below 500) and large-sized ones (with population 2,000 or above), being 35.6 and 9.2 respectively. About 59.5 per cent of the rural population lived in the medium-sized and 8.8 per cent in the small-sized villages. Villages having above 5,000 inhabitants were only 13 in number in 1971.

The urban population of 4,82,807 formed about 23.5 per cent of the district total, and was distributed over the six municipal towns of Saharanpur, Gangoh, Deoband, Roorkee, Manglaur and Hardwar, the two town areas of Nakur and Rampur Maniharan, the notified area of Ranipur, and the Roorkee cantonment board. Saharanpur city, with a population of 2,25,396 in 1971, is a class I town and occupies the 12th position among the cities and towns of the State of Uttar Pradesh.

Language

Languages, returned as mother-tongue, with the number of persons speaking each, at the census of 1971, are listed in the statement below :

Language	Total	Persons Speaking	
		Male	Female
Hindi	14,91,463	8,18,062	6,73,401
Urdu	5,26,349	2,87,521	2,38,828
Punjabi	26,146	15,354	10,792
Nepali/Gorkhali	1,819	1,334	485
Bengali	1,637	894	743
Garhwali	1,114	844	270
Marathi	1,108	842	266
Gujari	806	806	-
Gujarati	667	119	548
Malayalam	360	264	96
Bhojpuri	330	314	16
Sindhi	313	181	132
English	222	100	122
Tamil	214	129	85
Russian	186	90	96
Assamese	165	165	-
Gurmukhi	164	81	83
Marwari	150	83	67
Dogri	111	100	11
Telegu	105	51	54
Braj Bhasha	97	97	-
Kumauni	843	707	136
Kashmiri	87	72	15
Rajasthani	83	58	25
Oriya	76	51	25
Arabic	51	27	24
Bihari	50	50	-
Kannada	47	27	20
Indonesian	34	34	-
Manipuri	8	8	-
Multani	7	3	4
Sanskrit	6	6	-
Rathi	5	3	2
Pabari	4	1	3
Tibetan	3	1	2
Awadhi	2	1	1
Kanjari, French, Kangri, Deswali and Tulu.	One each		One each

While as many as 41 languages or dialects were returned as mother-tongues in the district, Hindi is the main language here, claimed as mother-tongue by 72.5 per cent of the entire district population, Urdu occupies the second position, with a percentage of 25.6 and Punjabi including Gurmukhi stands third being the language of about 1.2 per cent of the population. Among the rest Nepali/Gorkhali, Bengali, Marathi and Garhwali are spoken by about a thousand persons each.

The form of Hindi spoken in the district is Khari-boli or western Hindi, which is the standard form and is the official language of the State and has been given the status of the national language of the country. It has also been known as the Kauravi, because the region lying between Delhi and Saharanpur formed part of the country of the Kurus, rulers of Hastinapur and Indraprastha. The language has gradually evolved from the Prakrit and Apabhramsha spoken in these parts. Into the Khari-boli, the form of Hindi spoken in the Saharanpur district, have crept in many words and forms from Braj Bhasha, Punjabi, Urdu, Persian and even English. In 1901, it was estimated that some kind of western Hindi was spoken by 99.06 per cent of the people of this district, and the proportion, more or less, holds good even to this day. The Gujari form is peculiar to the Gujars of the district, and the Banjaras and Sansis also have a dialect of their own, but that cannot be considered peculiar to this district. There are many bi-linguists in the district, with Hindi as one of the languages. The educated, particularly the English knowing persons, are generally bi-linguists and sometimes, even multi-linguists. The Punjabis also often know Urdu in addition to Gurmukhi.

Script

The script used for Hindi and its different forms is the Devanagari, and that used for Urdu is the Persian, whereas the other languages are written in their respective scripts.

RELIGION AND CASTE

The population of the district, as classified according to religions at the census of 1971 is given in the following statement :

Religion	Persons	Male	Female
Hinduism	13,88,881	7,64,440	6,23,841
Islam	6,39,170	3,48,444	2,90,726
Sikhism	15,876	9,550	6,326
Jainism	8,430	4,411	4,019
Christianity	2,897	1,533	1,364
Buddhism	180	107	73
Total	20,54,834	11,28,485	9,26,349

Thus, of the total district population 67·5 per cent were Hindus, 31·1 per cent Muslims, and the remaining 1·4 per cent included Sikhs, Jains, Christians and Buddhists. The Jains and Buddhists mainly live in urban areas. In the rural population 69·5 per cent were Hindus and 30·0 per cent Muslims, while in the urban population 61·0 per cent were Hindus and 34·9 per cent Muslims.

Principal Communities

Hindu—This, major community of the district, is divided into the four traditional principal castes, the Brahmana, Kshatriya, Vaish and Shudra, and their numerous subcastes.

The Brahmanas are almost evenly distributed over the district. The Tagas who style themselves as Tyagi Brahmins reside for the most part in Deoband tahsil though they are found everywhere and occupy a large share of land.

The Kshatriyas, chiefly Rajputs, are distributed in all the tahsils, with the majority of them residing in Saharanpur tahsil.

The Vaishs have been one of the most important peoples in the district on account of their wealth and the large amount of land that they had acquired and held in proprietary right till the abolition of zamindari. Though strongest in the Saharanpur and Roorkee tahsils, their distribution is fairly even throughout the district.

The Bohras, who are said to have come from Marwar and are traders and money-lenders, are a caste peculiar to the Meerut Division and are generally included among the Vaishs.

Khatris are few in number, but Hindu Kambohs, who appear to be akin to the Khatris and came here from Punjab, are more numerous in this district than in any other part of Uttar Pradesh; they are, however, agriculturists. The Kayasths of the district are for the most part of the Bhatnagar and Saksena subdivisions.

The other subcastes mainly engaged in cultivation, are the Gujar, Jat, Taga, Mali, Saini and Kahar, who together constitute nearly a quarter of the total of the Hindu population.

The Gujar, numerically the strongest among cultivators, are practically confined to the western districts of Uttar Pradesh, and particularly to the Meerut Division. The number of Gujar in the Meerut district alone is a little more than that in the Saharanpur district where they are fairly evenly distributed, though they are more numerous in tahsil Nakur and Deoband and comparatively few in tahsil Saharanpur. The Gujar of this district belong to very large number of subdivisions the names of which are

often borrowed from Rajput septs. The chief is the Khubar to which the Landhaura family belonged, while important among others are the Batar and Chhonkar.

The Jats, a little less than one-third of the Gujars in number, belong chiefly to the Deswali and Pachhade subdivisions, and about half of their number is found residing in the Roorkee tahsil, their largest holdings lying in pargana Manglaur. They are cultivators of a very high order, with a fine broad style, and display untiring patience and industry.

The Malis, (also known as Baghbans or gardeners) and the Sainis are practically identical. They are almost evenly distributed over the four tahsils, the term Saini being applied chiefly in the Roorkee tahsil, while in tahsil Deoband the two names are used indiscriminately. There are also a few hundred the Kachhis and Muraos, who are usually included among the Malis and Sainis. The people of this entire group stand in the first rank of cultivators. Their speciality is market-gardening, and while they commonly betake themselves to general farming, they devote their attention chiefly to the more valuable crops.

The Kahars are found everywhere, almost in equal numbers in the different tahsils. They are employed as cultivators, labourers, water-carriers and domestic servants.

Ahirs, Lodhs and Rors who are comparatively small in number in the district, are mostly engaged in agriculture and allied occupations. Some of them continue to follow their traditional pursuits like cattle rearing, milk-vending, mat and twine making.

Occupational groups, like the Banjara, Barhai (carpenter), Bharbhuj (grain-parcher), Chhipi (cotton-printer), Darzi (tailor), Faqir (including the Jagi, Goshain and Bairagi), Gadariya (shepherd), Kori or Orh (weaver), Kumhar (potter), Lohar (blacksmith), Nai (barber), and Sonar (goldsmith), who together make up about 18 per cent of the Hindu population, are also generally included among the Other Backward Classes.

More than two dozen Scheduled Castes are represented in the district, which, at the census of 1971, had a total population of 4,79,043 persons, forming about 36 per cent of the Hindus and 23.3 per cent of the total population of the district. Again, about 92 per cent of them belong to rural areas and the rest to urban areas. The most numerous among them are the Chamars, also known as Dhusia, Jhusia or Jatav, who numbered 3,89,573 souls, constituting about 81 per cent of the Scheduled Castes population. They have comprised the great mass of the rural labouring peoples, owned only a few acres in proprietary right, and even as tenants possessed comparatively small holdings. Even now they form the bulk of agricultural labourers, the rest being employed as casual labourers, cobblers, shoe-makers and

maisons. Next come the Balmikis, also known as Bhangis or Khakrobs' who follow the profession of sweepers and scavengers, and numbered 45,920 souls at the census of 1971. They were followed by Dhobis (7,169), Dhangars (3,790), Balahars (2,644), Hars (1,905), Khatiks (1,769), Sansiyas (1,223), Pasis or Tarmalis (974), Shilpkars (505), Kanjars (691), Badis (470), Rawats (342), Dhanuks (320), Karwals (212), Doms (149) and Dabgars (178). Others, like the Badhiks, Korwa, Hela, Bangali, Nat, Bhuiyar, Majhwar, Boria, Ghasiya, Dharkar, Kol, Baiswar, Basor, Bawariya, Baheliya, Barwar, Bhantu, Gual, Mazhabi, Dusadh and Patari have less than 100 persons each. There were, in addition 20,316 persons who were described as belonging to the unclassified Scheduled Castes.

In 1971, the district contained 2,053 persons belonging to Scheduled Tribes, of whom 1,131 were males and 922 females. Most of them i.e., 1,510 were found to be residing in the rural areas of Saharanpur tahsil and of the remaining 344 persons were living in Roorkee tahsil.

The tahsilwise distribution of the Scheduled Castes and Scheduled Tribes population in the district, in 1971, was as given below :

Tahsil	Scheduled Castes			Scheduled Tribe		
	Persons	Male	Female	Persons	Male	Female
Saharanpur	1,44,506	78,547	65,963	1,510	821	689
Nakur	74,820	40,711	34,109	199	118	81
Deoband	1,12,474	61,344	51,130	—	—	—
Roorkee	1,47,243	80,161	67,082	344	192	152
Total	4,79,043	2,60,759	2,18,284	2,053	1,131	922

The Scheduled Castes people are now generally called Harijans, a name given to them by Mahatma Gandhi, and since Independence the Harijan welfare department of the State government has done much for their welfare and uplift, and rendered monetary help to educate them and improve their living conditions. Untouchability has been declared illegal under the law, and restrictions on the use of public wells and temples by them are disappearing. Still, by and large, a majority of them are not only uneducated but illiterate, backward and economically poor. Caste organisations and caste restrictions, at least in so far as food and marriage are concerned, persist even now, but in general inter-caste relations are gradually becoming harmonised. For social reformation of Scheduled Castes, Scheduled Tribes and Other Backward Classes, the U. P. Removal of Social Disabilities Act, 1947 has been enacted and the Untouchability (Offences) Act, 1955, is a further step towards the amelioration of their condition and status.

Muslim—The percentage of the Muslims in the district population in 1971 was 31·1, that in the rural areas being 30·0 and in the urban 34·3.

The Saiyids, held in veneration as being supposed to be the descendants of the Prophet, mostly reside in the Nakur and Saharanpur tahsils. More than half the number belong to the Husaini subdivision, and the rest include the Bukharis of tahsil Nakur, the Jafris of tahsil Roorkee, and the Tirmizis and Hashimis. The Pirzada family of Ambahta has been one of the big landowners. The Pathans are to be found mainly in the Saharanpur tahsil, the chief among the clans represented in the district being the Yusufzai, Kakar, Lodi, Rohilla, Ghorī, Muhammadzai, Tarin, Warakzai, Bangash, Khalil and Afridi. The Sheikhs proper, have sprung from old families of Muslim settlers and, not including persons descended from Hindu converts who have generally adopted the style and title of the Sheikhs. About two-fifths of them belong to the Saharanpur tahsil and the rest are more or less evenly distributed over the other tahsils. The principal subdivisions are the Siddiqi, Quraishi, Ansari, Faruqi and Usmani. The Mughals, only a few thousands, reside mostly in the Nakur and Saharanpur tahsils and belong to the Chaghtai and Turkoman clans, village Lakhnautā having been the headquarters of the latter since the days of Babur. The Muslim Rajputs, commonly known as Rangars, are mainly derived from the local Chauhans. They are generally found in Saharanpur tahsil. The Muslim Gujars, almost equal in number to Rangars, differ but little from their Hindu brethren, having obviously adopted only the form of Islam. The bulk of them reside in Nakur and Saharanpur tahsils. The Jhojhas are clearly of Hindu origin and assert for themselves a Rajput extraction. The Jhojhas are, however, said to be, as a class, the best husbandmen in the district, where they are far more numerous than in any other district of the State. They are found mostly in the Roorkee tahsil. There are also some Muslim Tagas in the district, evidently converts from Hindu Tagas. Then, there are the Garas, some of whom style themselves Mughals and others Saiyids, though in most cases they assert themselves to be descended from Rajputs, and say that the name is derived from the new custom of burying their dead. They have many subdivisions, often taken from the names of Rajput clans. They also are numerically far stronger in this district than in any other part of the State, are well distributed over the four tahsils, and have a good reputation as cultivators of a very high order. Among the remaining subdivisions, which are mostly occupational, are Telis (oilmen), Julahas (weavers). Faqirs, Qassabs (butchers) and Hajjams (barbers) the rest being made up of Dhobis (washermen), Bhishtis (water-carriers), Lohars (blacksmiths), Kumhars (potters), Behnas, Bhangis, Banjaras, Darzis, Barhais, Halwais, Ghosis, Sonars, Kambohs, Bhatiyaras, Kunjras, Kamangars, Saiqalgars, Khatiks, Kangigars, Sabungars, Atashbazs, Maimars and Bangalis.

Sikh—In 1901, there were only 477 Sikhs in the district, but by 1971 their number had increased to 15,876, forming about 0.77 per cent of the total population, of whom 10,654 lived in the urban and 5,222 in the rural areas. The number had increased consequent on the influx of displaced persons from the Punjab as a result of the partition of the country.

Jain—In 1971, there were 8,430 Jains in the district, of whom 1,248 resided in the rural areas and the remaining 7,182 in Saharanpur city and other towns. Considering that in 1901, they numbered 5,688, the increase has been much less than even the proportional increase in the total population. The Jains here are generally known as Saraogis (Shrawakas). They have included among them many families of wealth and landed property and have constituted an important and influential section of the populace. They are found throughout the district, but are strongest in the Saharanpur and Nakur tahsils. They are mostly educated and are engaged in trade, business, banking, the learned professions, particularly law and teaching, and own and run several educational and charitable institutions in the district.

Christian—Indian Christians had increased from 488 in 1891 to 1,617 in 1901 when there were, in addition, 1,205 Europeans and 150 Eurasians here. The phenomenal increase in the number of Indian Christians was obviously due to the proselytising activities of the Christian missions. In 1971, their number had increased to 2,897, of whom only 687 were found residing in the rural areas and 2,210 in the urban. They are mostly educated and engaged in missionary work, Christian institutions and government service.

Buddhist—There was only one Buddhist in the district in 1901, but in 1971 they numbered 180, mostly males, of whom 57 were found residing in the rural areas and 123 in the urban areas. The increase may possibly be attributed to the influx of persons from Tibet after the Chinese occupation or to conversion.

Religious Beliefs and Practices

Hindu—Hinduism, as prevalent in the district, as elsewhere, followed by about 67.5 per cent of the total population encompasses a vast gamut of religious experience, ranging from the transcendental mysticism of the monotheist to the worship and propitiation of gods and goddesses, like Siva, Parvati, Rama, Sita, Krishna, Radha, Hanuman, Ganesa and Devi (Durga, Kali or some other form), and of various minor godlings, ghosts and spirits. Diverse superstitions are indulged in, and bathing in the Ganga, particularly at Hardwar, is considered holy, more so on the occasions of the solar or lunar eclipses, Kartiki-purnima, Makar Sankranti, Vikhanti, Jeth Dasahra, Somwati Amavasya, the Kumbh and the Ardh-Kumbh. For a Hindu, generally, worship in temples is not obligatory, and only a few

persons visit them daily. Some people have in their homes a separate niche for puja, where images of the favourite deity or deities are installed. The more orthodox also perform morning and evening *sandhya* (prayers), and observe fasts on certain week-days or on certain *tithis* (dates) of the lunar month. Discourses and recitations (*katha*) from religious books, like the *Gita*, *Bhagavata* and *Ramayana* (or *Ramacharitamansa*), and collective singing of devotional hymns (*kirtans*) are sometimes arranged privately or publicly. Shrines of certain Hindu saints, and even tombs of some Muslim *pirs* (saints) are visited on occasions by many Hindus. The chief deity worshipped by some of backward section of the community such as Kahars, Kumhars, Gadariyas, Saints and Chamars, is Baba Kalu, a local saint of the neighbouring district of Muzaffarnagar.

The principal centre of Hindu religion in this district is the holy town of Hardwar, situated on the right bank of the Ganga, close to the point where this holiest of rivers enters the plains. It is one of the greatest centres of Hindu pilgrimage in India, and the most sacred place here is the Hara-ki-Pairi (or Hari-ki-Pairi), which is the chief bathing ghat, so called from the imprint of Vishnu's feet shown on a stone built into the wall. Ablution in the river at this ghat is the great rite practised by the pilgrims who believe that purgation from sin is thus obtained. This leads very often to great rush of bathers at the propitious moment (*parva*) on the occasion of the Kumbh *mela*.

Muslim—About 31 per cent people profess Islam. As elsewhere, they believe that there is one God and that Muhammad is His prophet. They are enjoined by their religion to offer prayers (*namaz*) five times a day, preferably in a mosque, keep fast (*roza*) in the month of Ramadan, undertake hajj to Mecca, and contribute a portion of their earnings, in cash or kind, to charitable purposes (*zakat*). Their holy book is the *Quran*, and one who can recite it by heart is called a *hafiz*. About 98 per cent of the Muslims of the district belong to the Sunni sect, a little over 1 per cent being Shias, a little less than 1 per cent the Lalbegis (Muslim sweepers or Khakrobs) and a very few Wahabis. As the Muslims have been associated with the district since early mediaeval times and have formed a fair proportion of its population, it is but natural that numerous mosques, Idgahs and Dargahs are found in existence in the city, the towns and many villages of this region, but only a few of them are notable.

Many Muslims of the district put faith in *pirs* (saints), and hold *urs* celebrations at their tombs, the more important being the Goga Pir at Saharanpur, Burha Babu at Islamnagar, Shah Abdul Quddus at Gangoh, and Pir Khala in the Pathri forest. Among the *pirs*, Alauddin Ali Ahmad Sabir has a great importance in the district. On account of his tomb at Piran Kaliyar (in Roorkee tahsil), the village has become an important pilgrim

centre of the Muslims and is known as Kaliyar Sharif. People, who have faith in this saint, assemble here in the month of Rabi (from 1 to 14) and pay their homage by offering flowers, sweets, *chadar* (white cloth sheets) and prayers.

Sikh—The Sikhs claim to be monotheists and disavow idolatory and caste distinctions. Their religion enjoins on the believers the wearing of a *kangi* (comb), a *kara* (iron bangle), a *kirpan* (dagger) and *kachha* (shorts) and prohibits the cutting of the *kesh* (hair). Their holy book is the *Grantha Sahib*, and they attend congregational prayers in the *gurdwaras* (places of Sikh worship), several of which exist in the city and some other places in the district.

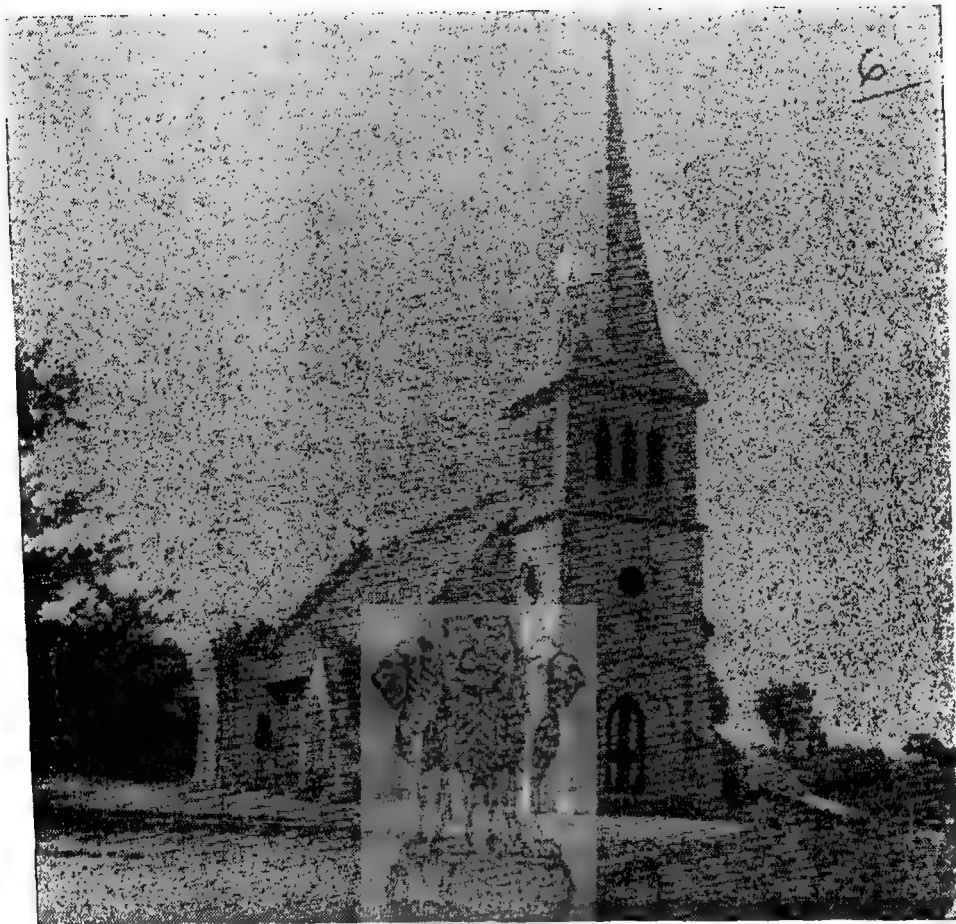
Jain—The Jains (followers of the Jina, or the conqueror) believe in the *tri-ratna* (three gems) comprising right faith, right knowledge and right conduct, which constitute the path of *moksha* (liberation). According to their belief, the universe has had no beginning and will have no end, and no creator is necessary to explain the cosmic phenomena. They are pure vegetarians, believe in the doctrine of *ahimsa* and the law of *karma*. They worship in their temples the images of their *tirthankaras* or Jinas. The Jains here belong mostly to the Digambara sect, there being but few Shvetambaras and Sthanakavasis. The city of Saharanpur possesses several beautiful Jain temples, besides those in many other towns and villages which contain a Jain population.

Christian—Christianity puts faith in the 'holy trinity' comprising God, His son (Jesus Christ) and the Holy Ghost, and believes in resurrection and the life everlasting. The *Bible* is the holy book, and congregational prayers or worship are performed in churches or chapels, particularly on Sundays. The community in this district is mainly made up of Indian Christians. The denominations represented here are in the main the Church of England, Methodist, Presbyterian and Roman Catholic. Missionary work was started in this district as early as 1835. In Anglican church (St Thomas's) was built at Saharanpur in 1854 and consecrated in 1887. The church of St John, the Baptist, had been erected at Roorkee in 1852 and consecrated four years later, and the handsome church at Jwalapur was built in 1900. There are also several other churches and chapels in the district.

Buddhist—The main tenets of Buddhism are that while there is sorrow in the world, the eight fold path of virtue—right views, right aspirations, right speech, right conduct, right living, right effort, right mindedness and right meditation—leads to the end of sorrow and to the attainment of peace, enlightenment and nirvana.

Festivals and Fairs

Hindu—The series of Hindu festivals in the district commences with Sheetla Ashtmi which falls on the 8th day of the dark fortnight in Chaitra, the first month of the Hindu calendar, and is dedicated to the propitiation

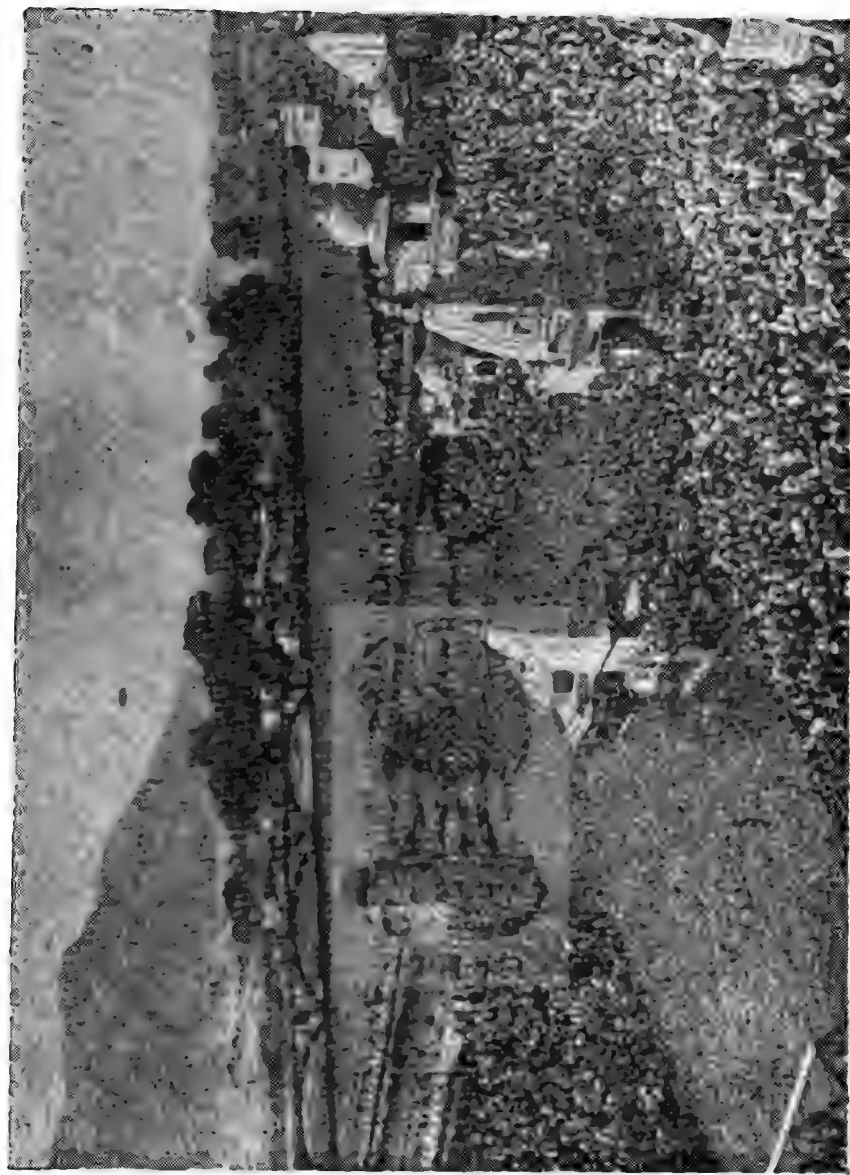


St. Thomas's Church, Court Road, Saharanpur

of the goddess Sheetla. The 9th day of the latter half of that month is called Ram Naumi, the birthday of Rama, when devotees keep fast, decorate temples dedicated to him and worship his images. The 10th day of the bright fortnight of the next lunar month Jyestha is called the Ganga Dasahra or Jeth Dasahra and is a great bathing festival, particularly on the Ganga at Hardwar. On the occasion of Nag Panchmi, the 5th day of the bright half of Sravana, the serpent gods are worshipped, and on the 15th, known as Rakshabandhan, sisters tie *rakhi* (thread symbolising protection) on the wrists of their brothers, and Brahmana priests on those of their patrons. Janam Ashtmi, the birthday of Krishna, is celebrated on the 8th day of the dark fortnight of Bhadra, when decorated cradles containing idols of the incarnation are installed in certain homes and temples, and the devotees keep fast. Pitra-visarjan Amavasya, the 15th day of the dark fortnight of Asvina, is devoted to the memory of deceased kinsmen. The worship of Durga is continued for nine days, during the bright half of Asvina, known as Nav Ratri, and the 9th day is known as Durga Naumi. The next day is Dasahra or Vijaya Dashmi, dedicated to the worship of the goddess Vijaya, also commemorating the victory of Rama over Ravana. During the first half of the month of Kartika, fourth day is called Karwa Chauth, when married women keep fast for the well-being of their husbands, the 13th day is known as Dhan Teras when metal utensils and jewellery are purchased, the 14th as Chhoti Diwali or Narak Chaudas, and the 15th as Diwali or Deepawali proper. On this occasion, houses and shops are cleaned and white-washed, and illuminated with earthen lamps, candles or electric bulbs. Lakshmi, the goddess of wealth and Ganesa are worshipped, sweets distributed and gifts exchanged. The day following Diwali is devoted to Goverdhan Puja and is also known as Annakoot, and on the next day falls Bhaiya Dweej when sisters entertain their brothers. On the last day of Kartika, which is a Purnima, is celebrated a great bathing festival. The Makar Sankranti, usually falling on 14th January, is another bathing festival. Basant Panchmi, the 5th day of the latter fortnight of Magha, is devoted to the worship of Saraswati, the goddess of learning and Sivaratri, the 13th of the first half of Phalguna, to that of Siva. The last of the important Hindu festivals of the year is the Holi, occurring on the last day of Phalguna, when bonfires are lighted on cross-roads, and newly harvested ears of barley are roasted in them as offering to the gods. On the following day, people in a gay and frolicsome mood throw coloured water (*rang*) and rub coloured powder (*gulal*) on each other.

About a dozen and a half Hindu religious fairs are held annually in different parts of the district, several of which are the bathing fairs held on the banks of the Ganga at Hardwar. Usually the annual festive bathing commences in the month of Chaitra, after the sun has entered the zodiacal sign of *mina* (Pisces) and concludes in the next month on the day when the planet enters *mesha* (Aries), agreeably to the solar computation of

Hindu astronomers, generally about the middle of April. In the year when the planet Jupiter (*Vrahaspati*) happens to be in the sign of *kumbha* (Aquarius), the fair takes the form of the Kumbh Mela, which occurs every twelfth year. It is celebrated with much greater rejoicing and festivities and attended by lakhs of pilgrims from all over India. Pilgrimage to Hardwar at these duodecennial periods, and taking dip in the Ganga, particularly on *purbi*, the principal day of bathing, usually 13-14 April, is considered the most fortunate and efficacious. In 1796 and 1808, the attendance in Kumbh fair was estimated at above twenty lakhs while in 1820, about 430 persons lost their lives, in consequence of a desperate rush for bathing in the sacred pool. In order to obviate the possibility of such occurrences, the present ghat of sixty steps was constructed. In 1892, the fair was broken up on account of an outbreak of cholera epidemic and the vast concourse of people sent off before the great bathing day; and this resulted in the formation of the Hardwar improvement society, which introduced various sanitary reforms. The Kumbh fair of 1950 was successfully held with attendance of about twenty lakhs pilgrims. In 1962, this fair is estimated to have attracted about twenty lakhs bathers on April 13, the principal bathing day. The attendance in Kumbh fair of 1974 was about forty lakhs. Exactly six years after a Kumbh occurs the Ardh Kumbh, also a big fair, attracting about five lakhs pilgrims. Other bathing fairs held at Hardwar are the Vikhanti, Baisakhi, Jeth Dasahra, Kartiki Purnima, Makar Sankranti or Lohri, and Somavati Amavasya (Amavasya falling on Monday), which are attended by 5,000 to 25,000 pilgrims. The Shakumbri Devi fair, held on the 14th day of the bright fortnight of both Asvina and Phalguna, at the temple of that goddess in village Inderpurbhawan of tahsil Saharanpur, attracts a gathering of about a lakh of persons. Fairs in honour of Siva are held on every Monday of the month of Sravana at Kankhal and Shaklapuri, the former attracting about 10,000 devotees and the latter 2,000. Fairs in honour of Kali Devi at village Kota on Chaitra *sudi* 8, Mansha Devi at village Datauli Rangarh on Kartika *sudi* 8, Mahu Mayee at village Aghiana *urf* Jamalgarh on Chaitra *sudi* 14, at Devi Kund at Deoband on the same day, Deviji at Bhagwanpur on Asvina *sudi* 8, and Mansha Devi at Hardwar on Kartika *sudi* 8, are attended by 500 to 5,000 devotees. Other Hindu fairs of the district are, besides the universal Holi, Dasahra and Ramlila fairs, the Piyara Ji at Randewa on Chaitra *badi* 6, Baba Haridas at Gangoh on Chaitra *badi* 14, Ganesh Chauth at Lather Deva on Bhadra *sudi* 4, and Chuhar Mal at Garh Meerpur on Asvina *sudi* 5, which attract from 2,000 to 5,000 persons each. The Gogga Pir or Guggal fair held at Saharanpur on Bhadra *sudi* 10 is attended by about 60,000 persons. Another fair which attracts the gathering of 6,000 persons is held at Islamnagar on Ashvini *badi* 6 is known as Burha Babu fair. These fairs are



Har-ki-Pairi (bathing ghats) during Kumbh Mela 1974 at Haridwar

also attended by Muslims in large numbers. A Shaheed Memorial fair is held annually at Rankhandhi (in Deoband tahsil) on Asvina *sudi* 14, to preserve the memory of some students, who lost their lives in an accident in 1956. The Chhariyon-ka-Mela is held in many places, especially of Manakmau near Saharanpur, in the month of Bhadra, in honour of Zahir Diwan or Goga Pir.

Muslim—Among the more important Muslim festivals, Id-uz-Zuha is celebrated on the 10th of Zilhij, in memory of the prophet Ibrahim's submission to the will of God, by holding community prayers (*namaz*) in Idgahs and sacrificing sheep and goats in the name of God. The first ten days of the month of Muharram are devoted to the memory of the martyrdom of Imam Husain and his companions on the battlefield of Kerbala, and the duration is particularly observed as a period of mourning by the Shias, Ashra, the 10th day of Muharram being the most important one. Chehlum, on the 20th of Safar, marks the end of the 40-day period of mourning. Barawafat, the birthday of the prophet, Muhammad is celebrated on the 12th day of the month of Rabi-ul-Awwal. On the 14th of Shaban falls the Shab-e-Barat, a festival of rejoicing, attended by a display of fireworks, distribution of sweets, and *fattha* prayers for the peace of the departed. Ramadan, the month of fasting, concludes with the festival of Id-ul-Fitr, which is celebrated by holding community prayers in Idgahs, and exchange of gifts and greetings.

Other Muslim fairs held in the district are generally *urs* celebrations on the tombs of certain important *pirs* (Muslim saints) who flourished here at one time or the other. The most important of them is the one held in memory of Shah Alauddin, at Piran Kaliyar near Roorkee, from 1 to 14 of the month of Rabi-ul-Awwal, and attended by about 50,000 persons, including many Hindus. Another is the *urs* of Shah Abdul Quddus at Gangoh on Jamad-us-Sani 22-23, attended by about 6,000 persons.

Sikh—The important festivals of the Sikhs are the birthdays of Guru Nanak Deva and Guru Govind Singh, when processions are taken out, congregational prayers are held in the *gurdwaras* and extracts from the holy *Granth* are publicly read and recited. The Baisakhi and Lohri are also celebrated, particularly at Hardwar, where they take the form of bathing fairs also.

Jain—The Jains celebrate the birth and nirvana anniversaries of the last *tirthankara*, Mahavira, the former on the 13th day of the bright half of Chaitra, and the latter on the Deepawali day. The Paryushan or the

Dashalakshana-parva, during the last ten days of Bhadra, and the three Ashtanhikas, during the last eight days each of Kartika, Phalguna and Asadha, are the periodical holy days when the pious keep fasts and perform worship in the temples. The *rathayatra* or car processions are taken out annually at Saharanpur, Deoband, Roorkee and several other towns.

Christian—The important festivals of the Christians are the Christmas (25th December), which marks the birthday of Jesus Christ, the Good Friday which commemorates his crucifixion and Easter in memory of the resurrection. They also particularly celebrate the New Year (January 1).

Buddhist—The most important festival of the Buddhists is Buddha Purnima, on the last day of Vaisakha, which marks the Buddha's day of birth as well as nirvana.

A list of important fairs has been given in Statement II at the end of the chapter.

SOCIAL LIFE

Property and Inheritance

The succession and inheritance to property other than agricultural holdings, among the Hindus, Sikhs, Jains and Buddhists, are being regulated by the Hindu Succession Act, 1956. This Act confers equal rights on daughters in paternal property along with their brothers. In practice, however, the law is often ignored and daughters are deprived of their inheritance, especially if there are one or more sons, by making wills in favour of sons. The succession and inheritance to agricultural holdings, prior to 1952, was governed by the U. P. Tenancy Act, 1939, but after the operation of the U. P. Zamindari Abolition and Land Reforms Act, 1950, the devolution of agricultural holdings is made thereunder, ignoring the Hindu and Muslim laws in this respect. The Act further provides that all lineal male descendants without regard to propinquity or remoteness may inherit.

The joint family and co-parcenary systems are still found to persist to some extent, but they are rapidly disintegrating under the impact of new social and economic forces and the growing individualistic outlook. The pattern of family in the district is patriarchal, and the women are mostly dependent on their menfolk for maintenance and protection; only a few of them are economically independent and earn their own living.

Marriage and Morals

The distribution of people of different age-groups according to their marital status, as per census of 1961, is indicated in the statement given below :

Age group	Unmarried		Married		Widowed		Divorced or separated		Unspecified status	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0—9	2,49,134	2,17,484	—	—	—	—	—	—	—	—
10—14	98,093	75,26	3,661	9,543	41	30	80	24	261	187
15—19	54,104	20,365	21,196	41,201	237	103	146	29	119	68
20—24	26,353	2,334	44,253	63,643	933	362	193	49	49	58
25—29	9,191	495	57,399	61,386	2,024	747	226	48	42	61
30—34	5,631	248	51,976	50,183	2,664	1,574	206	60	27	61
35—39	3,052	115	45,704	38,533	3,256	2,251	164	30	27	34
40—44	2,826	116	39,977	31,074	4,863	4,556	133	48	27	39
45—49	1,920	44	28,900	22,709	4,789	4,792	109	28	20	20
50—54	2,183	53	29,322	17,061	8,073	9,307	92	33	15	29
55—59	989	24	12,772	9,645	4,546	4,578	45	12	9	15
60—64	1,373	38	18,177	7,386	8,985	10,816	48	28	12	14
65—69	538	59	6,170	2,978	4,059	4,000	30	4	7	2
70 and above	1,109	14	10,491	2,977	11,077	10,551	28	11	10	8
Age not stated	803	687	90	28	7	5	1	5	5	—
Total	4,57,299	3,17,345	3,70,088	3,58,347	55,591	53,672	1,501	409	630	596

The Hindus regard marriage as a sacrament which is governed by the *Dharma-shastras*. In practice, however, customs and traditions, which often vary from locality to locality, caste to caste, and sometimes even from family to family, play an important part. Inter-caste and inter-subcaste marriages, as also those between persons belonging to the same *gotra*, seldom take place, although these customary restrictions have been done away with by the Hindu Marriage Act, 1955. A marriage between *sapindas* is, however, invalid under the law which also makes polygamy and polyandry illegal. The minimum age prescribed for marriage, under this Act, is 18 years for a man and 15 years for a woman, provided that the consent of the latter's guardian has to be obtained if she is below 18 years in age. Since 1961 there was no married person under the age of 10 years in the district, child marriage even among the illiterate and backward sections of the community seems to have become unpopular. But, about 25,000 males and twice as many females, belonging to the age-group 10—19 were found married, which shows that in spite of the law early marriage still persists in certain sections of the district population. Ordinarily, marriages are arranged by the parents or guardians, sometimes through an intermediary. Usually, the girl's people initiate the proposal, on the acceptance of which by the boy's people, the betrothal ceremony (*rokna*, *sagai* or *lagan*) is performed at the latter's house. Then on a mutually appointed day, the bridegroom's party (*barat*) goes to the house of the bride in the form of a procession. There the groom and his party are accorded reception, and at the doorstep of the house the women of the family wave lamps (*arta*) around his face, and, in some cases, particularly among the more sophisticated in the towns, an exchange of garlands (*varmala* or *jayamala*) takes place between the would-be couple. The *barat* is then feasted and the groom is taken to the *mandap* (marriage pavilion) where the priests perform the rituals, the bride's parents the *kanyadan* (giving away of their daughter) and *gathbandhan* (tying up the marriage knot), and the couple the *bhanwar* or *saptpadi* (going round the sacred fire seven times). Generally, on the next day, the bridegroom with his party takes leave (*vilda*) and returns to his house with the bride and the presents given to the two by her people. Sometimes a *gouna* or *chala* ceremony also takes place, a few months after the marriage proper. People of the other Backward Classes and the Scheduled Castes also consider marriage a sacred rite, but the ceremony is very often simpler and many a time takes the form of *dola*, performed usually at the bridegroom's house. Applying *sindur* (vermilion) in the parting of the girl's hair, pouring oil on her head, giving her a gift, usually in the form of some ornament, a declaration by her of her willingness to accept the groom in the presence of the caste panchayat, tying an end of the garment of the bride to that of the groom, communal feasting and recitation of the *kathas* are the usual formalities particularly for *karaos* (remarriages), though it is not necessary to undergo all of them. The more well-to-do, however, try to emulate the higher castes in the performance of their marriage ceremonies.

The Sikhs also take out a *barat* procession to the bride's house, but the chief ritual consists in the recitation of extracts from the holy *Granth* which the couple circumambulate several times. Offerings to the *gurdwara* are made, and the invitees, including the groom's party, are feasted and entertained. In a Jain marriage, sacred hymns from the Jain scriptures are recited and the puja of their own deities is performed. Otherwise, marriages among the Jains are almost similar to those of the Hindus, particularly the Vaishns.

For the Muslims marriage is a contract, and every person of sound mind, who has attained puberty, may enter into such a contract. Their religion also permits polygamy to the extent of four wives at a time. The principal condition for a marital contract is the settlement of *mehr* (dower), payable to the wife from her husband, at the time of *nikah* (marriage) or some time after it. The first ceremony is the *paigham* or *mangni* (asking for the hand of the bride) initiated by the groom or his people on his behalf. On the appointed day, the groom with his party (*barat*) goes to the bride's house where the vakil of the bride obtains the consent of both the contracting parties in the presence of two witnesses, who should be sane adult Muslims, and the *qazi* performs the *nikah* or *aqad*. After the formal leave-taking (*rukhsat*), the groom takes the bride to his house. In a Shia marriage, two *mujtahids*, one representing each party, take the place of the *qazi*. Among certain of those Muslim castes which were converted from Hinduism, such as the Muslim Rajputs or Rangars, some Hindu customs are still retained. For example they still abide by the Hindu rules of exogamy and generally do not marry first cousins.

Christian marriages are governed by the Indian Christian Marriage Act, 1872, as amended in 1952, and are generally performed in churches.

Dowry—The giving and accepting of dowry has been made illegal by the Dowry Prohibition Act, 1961, but the dowry system still persists in the district as elsewhere in certain sections of the community, such as the Vaishns (including the Jains) and the Brahmanas.

Civil Marriage—The Special Marriage Act, 1954, provides for the performance and registration of marriages by a marriage officer appointed by government for this purpose in the district. Religion or caste differences are no obstacles to such a marriage, nor are any formal rites or ceremonies required to be performed. Very few people, however, take recourse to a civil marriage. The number of civil marriages performed during the last five years is shown below :

Year	Marriages solemnized under section 13 of the Special Marriage Act	Marriages registered under section 16 of the Special Marriage Act
1968	5	2
1969	6	1
1970	17	—
1971	4	—
1972	23	—

Widow Marriage—Custom does not permit a Hindu widow, particularly among certain sections of the community, to marry again, but the Hindu Widow Marriage Act, 1956, has made it easy and legal for a widow to do so. The fact that in 1961 there were 53,672 widows in the district, 1,242 of them under the age of 30, indicates that traditional prejudices are still strong. Among the Shudras or the Scheduled Castes and some of the Other Backward Classes, including the Gujars, Jats and Khagis (Chauhans), re-marriage (*karao*, *ghar-baithana* or *dhareja*) of widows is customary, and there is no difference in the status of the wife or children of such a marriage as compared with an ordinary marriage. The personal law of the Muslims, as well as that of the Christians, also permits widow marriage.

Divorce—At the census of 1961, as many as 1,501 males and 409 females were returned as divorced or separated, in this district. It is, however, not known how many of them were so as a result of legal proceedings. Community-wise figures are also not forthcoming. Formerly, among the Hindus, including Sikhs and Jains, divorce was not permissible either by custom or by law, except that among the Scheduled Castes and some of the Other Backward Classes dissolution of marriage was possible with the sanction of the caste panchayat. After the enactment of the Hindu Marriage Act, 1955, divorce and dissolution of marriage under certain specific circumstances has become permissible and possible for others as well, although a very few persons go to court to seek such separations. The following statement shows the number of divorce cases referred to the court by men and women in the district from 1966 to 1972 :

Year	Cases referred to court			No. of cases in which divorce was granted
	By men	By women	Total	
1966	18	30	48	25
1967	21	23	44	21
1968	15	17	32	19
1969	17	26	43	23
1970	20	26	46	26
1971	25	25	50	20
1972	29	34	63	23

A Muslim husband could divorce his wife under the personal law of the Muslims, and the Dissolution of Muslim Marriage Act, 1939, made it possible for a Muslim wife, too, to seek divorce from her husband under certain conditions. Divorce among the Christians is governed by the Indian Divorce Act, 1869.

Prostitution and Traffic in Women—No organised prostitution centres or brothels are now said to exist in the district, which is, perhaps, the result of the enforcement of the Suppression of Traffic in Women and Girls Act, 1956. Formerly, there were, no doubt, many prostitutes and dancing girls plying their trade in the city and other towns of the district, but their exact numbers are not known. Some have, doubtless, adopted family life by marrying. In 1970, there were 30 prosecutions under the Act, resulting in 27 convictions. In 1971 there was only one prosecution.

Gambling—The Public Gambling Act, 1867, as amended in 1952 and 1962 for the State of Uttar Pradesh, made gambling in public an offence punishable under law in this district as well. The vice does not appear to have assumed serious proportions here, nor any peculiarities, special features or particular periods of indulgence except perhaps the Diwali festival, are known. The following statement shows the number of persons prosecuted and convicted during the 5 years ending 1971 in the district :

Year	Number of prosecutions	Number of convictions
1967	248	183
1968	260	157
1969	189	122
1970	200	105
1971	206	64

Home-life

In 1971, as per census records, there were 921 'houseless persons' in the district, of whom 647 were males and 274 females, and of the total 203 were found in the rural area and 444 in the urban, the tahsilwise break-up being Saharanpur 376, Nakur 75, Deoband 64, and Roorkee 406. The 'institutional population' then numbered 16,149 souls (males 14,574, females 1,575), of whom 3,697 belonged to the rural areas and 12,452 to the urban. As many as 11,132 of them lived in the Roorkee tahsil, and of this number, too, 10,825 in its urban area alone. There were 3,51,906 'occupied residential houses' in the district, 2,75,641 in its rural areas and 76,265 in the urban. The average size of a household (group of persons ordinarily living together and taking meals from a common kitchen) in the rural area was 5.54 and

in the urban areas was 5.36 in 1971, whereas in 1961 the district average was 4.9. This shows that the size of the average household had slightly increased during that decade. In 1971, households living in one-room tenements were predominant, accounting for 53.5 per cent of them, while those living in two, three and four rooms were 27.7 per cent, 9.8 per cent and 4.1 per cent, respectively, and those occupying five or more rooms, about 4 per cent. The households which had no regular room to live were only 5 in number. Again, in the rural areas, the average density of persons per room was 3.05 and in the urban areas 2.34. Considering households occupying one-room tenements only, the average density per room both in rural and urban areas was 4.60, which is indicative of congestion in living accommodation.

Houses—In the building of common houses, small ordinary structures raised on square or rectangular plinths, no set architectural pattern or design is followed in the district. An average middle class dwelling usually possesses a courtyard (*angan* or *chouk*) inside, surrounded by living rooms, kitchen, store-room and sitting room (*baithak*), generally adjacent to the passage (*dehliz*) leading to the main entrance. Sometimes there is also a narrow platform (*chabutra*) in front of the house. The improved socio-economic status of the rural inhabitants and the increasing urbanisation has resulted in an increase in the percentage of pucca dwellings in the rural areas of the district, from 11.7 in 1961 to about 25 in 1971. Mud is the predominant material used for making walls in the rural areas and burnt bricks in the towns, about 41.5 per cent of rural houses and 85.7 per cent of urban dwellings, respectively, being of such types. Houses with mud walls in towns account for 6.9 per cent and those with burnt brick walls in villages for 25.2 per cent. The most predominant roofing material, used in 77.1 per cent of rural houses, is grass, leaves, reeds, thatch, wood, mud, unburnt bricks or bamboo followed by bricks and lime in 11.6 per cent of the houses there. Cement and concrete constitute the most prevalent roofing materials in the urban areas, accounting for 43.8 per cent of the house, and bricks and lime for 33.1 per cent. Roofs in the district are made mostly flat. Houses are generally single-storeyed, although there are many with two or three storeys in the city and big towns. The residences of the erstwhile big landlords and the very rich in the city, certain towns and even some villages are big, spacious and well-built mansions. Many cement and concrete structures of the modern type are also to be seen in Saharanpur and Roorkee, particularly in the newly developed colonies.

Furniture and Decoration—It usually depends upon the taste, means and social status of a person how and with what pieces of furniture, decoration and other accessories he furnishes his dwelling place. Those who are well off and more sophisticated, particularly in the city and the big towns, have in their houses regular drawing room suites, dining tables, dressing tables, cupboards, almirahs, sets of chairs and other modern fittings and

accessories. The less affluent urban folk, and even the rich in the villages, rest content with a few cane, wooden or reed chairs (*moorhas*), wooden tables and stools, a *takht* (wooden divan) or two and a few charpoys. The common people, both in urban and rural areas, do with some odd chairs or *moorhas* and an occasional table and cheap bamboo-and-string cots, or a small *takht*. Clay or wooden toys, pictures and calendars of gods, goddesses, religious subjects and (more recently) of film stars are used for beautifications. Designs made on the doors and walls on certain festive occasions often serve as decorations in the houses of common people.

Food—Wheat, gram, barley, maize, jowar and *bajra* (small millet), together with pulses like *urd*, *moong* and *arhar*, constitute the staple food-stuffs in the district. Rice is also consumed, but rarely. The common villager and the poor in the towns generally subsist on loaves of bread made of flour taken with boiled pulses or cooked vegetables and have less variety in their food. Parched grain (gram or maize) with a lump of jaggery is often taken for lunch by the farmer and the labourer. The well-to-do mainly take preparations of wheat, or wheat and gram mixed, vegetables, seasonal fruits, condiments, milk, ghee, butter and sugar. *Mathha* or *chhachh* (butter milk) and sugar-cane juice in the season are favourite drinks for such villagers as can afford it. By habit and preference, the Hindus are generally vegetarians, whereas the Muslims, Sikhs and Christians are mostly non-vegetarians. The poor among them, particularly in the rural areas, cannot, however, afford to eat meat daily or even very often. Tea drinking and smoking hookahs, *biris* or cigarettes are becoming more common day by day.

Dress—There is nothing peculiar or distinctive about the dress of the inhabitants of this district, since a kind of standardisation in this matter has for some time been taking place, particularly in the urban areas. In the villages, Hindu males generally wear dhoti and *kurta* (long, loose shirt), sometimes also a *saluka* or *jakat*, and a cap or turban, the Muslims usually wearing pyjamas in place of dhoti. Hindu women usually wear a *lehnga* (long skirt) or *salwar*, a *saluka* (loose blouse or small shirt) and *orhni* for covering the head and upper part of the body, the pyjamas replacing the *lehnga* in case of Muslim women who also observe purdah more strictly and usually wrap themselves in a *burqa* (heavy veil) when they go out. Hindu women in the towns usually wear sari and blouse, while the Jat, Sikh and other Panjabi women wear *salwar*, *kurta* and *dupatta*. In the urban areas, some elderly males, both Hindus and Muslims, are seen wearing *churidar* pyjamas, *achkans* (long, buttoned-up coats) and Gandhi-caps. The educated and more advanced among the town-dwellers usually take to western styles, a bushcoat or bush-shirt with trousers or slacks being the more popular dress as in other cities.

Jewellery—Men in the district commonly wear no jewellery, except for a ring or two on the fingers and a gold or silver chain round the neck, the Gujars and Jats being often seen wearing small ear-rings (*murkts*) also.

Women are, no doubt, fond of adorning themselves with various items of jewellery, such as, glass bangles (*churis*), gold or silver bracelets (*pohnchi*, *kangan*, *dastband*, etc.), armlets (*bajuband*), finger rings, nose-ring, nose-pendant or nose-stud, ear-rings, earbobs, eardrops or eartops, collars (*hansuli* or *guluband*), necklaces, necklets, pendants, *hars*, etc., round the neck, a *tika* or *jhumar* for the forehead, anklets or *payals* for the ankles and feet, and toe-rings (*bichhua* or *chutki*). The poor generally have their ornaments made of silver or baser metals, glass beads and shellac, whereas the rich those made of gold, sometimes studded with precious or semi-precious stones including pearls. Light ornaments like toe-rings (*bichhua*), glass bangles, nose-stud (*nathni*) etc., are mostly used for daily wear, while the heavier ornaments are usually worn on special occasions like festivals and marriages. The tendency to deck oneself with jewellery is, however, on the decline, especially among the educated and more sophisticated sections of society due to change in outlook and fashions and in general due to the high price of gold and silver.

Communal Life

Amusements and Recreations—The cinema has now come to be the chief source of entertainment and recreation for the public in the city and bigger towns, where in 1974, twenty-five cinema houses exist. In 1951, there were only 12 picture houses in the district, and by 1960, their number had risen to 18, the annual number of cinema goers being then estimated at a little over thirty-one lakhs giving a daily average of about 8,550. In 1974, the average seating capacity per cinema appears to have been about 630. With the rise in the number of cinemas and the growing habit of cinema going, the average number of cinema-goers appears to have increased by at least 50 per cent. Many of the people living in the countryside also try to enjoy a show or two whenever they happen to visit the city or the towns where the facility exists. Sometimes touring cinemas, circuses or theatrical parties visit different parts of the district. The information department of the government also occasionally arranges documentary film shows or puppet shows in the different development blocks. The possession of a radio or transistor set has become quite common, not only in the urban areas but even in the villages. There are a number of clubs and associations in places like Saharanpur and Roorkee, which are patronised by officers, the gentry and members of the learned professions, and cater to the recreational needs of their members. Common among games and sports of the indigenous variety, played in the district, are wrestling bouts, foot race, *kabaddi* or *du-du*, *gulli-danda*, *ankh-michauni*, kite-flying, pigeon-flying, *chausar*, chess and playing cards. These are more common in the rural areas. Among modern games and sports cricket, hockey, football, volley-ball, badminton, tennis, ping-pong (table tennis) and carrom are the ones usually indulged in. Besides the District Sports Association, a number of clubs and associations

exist in the city and some of the big towns, like Roorkee, which arrange matches and tournaments and promote various games and sports. Almost all the educational institutions in the district have arrangements for outdoor games, scouting and physical training. The district branch of the Prantiya Rakshak Dal, and the Mahila Mangal Dals (women welfare clubs), Yuwak Mangal Dals (youth welfare clubs), and Bal Mangal Dals (child welfare clubs), organised in the different development blocks of the district also serve as agencies of recreational activities for their respective members. The various religious and semi-religious festivals and fairs, *bhajan mandalis*, *kirtans*, *kathas*, *kavi-sammelons*, *mushairas*, *qawwali* parties, *Alha* recitals, folk-songs and folk-dances, held or arranged on particular festive occasions, in particular seasons, or according to facility and convenience, help in relieving the monotony of life of the masses, the *urs* at Piran Kaliyar being especially noted for its night-long *qawwali* parties. The annual district exhibition was first sponsored by A. J. Sladen, the collector of this district, in 1878, and was held in the Farodgah ground, but remained discontinued for the next several years. Harrington, another collector revived it in 1883, when it was held on a site adjacent to the Botanical Garden, and continued to be held till 1886 when it was given up by the then collector, Irving. For the next 27 years there was no exhibition, till 1913, when Fergusson, the then collector, once more revived it and got the opening ceremony performed by Sir James Meston, the lieutenant-governor of the provinces. For the succeeding six years there was again a break, this time due to the First World War, and the exhibition was held again in 1920 under the auspices of the collector, W. Raw. In 1921, there was again no exhibition, but the next year, S. M. Habibullah, the collector, made it a great success. Since then it was held almost every year, it was both an agricultural and industrial exhibition, as well as a grand fair with a variety of shops and shows, and was a great source of recreation for the public, lasting for over a week. It has, however, been discontinued as the ground was utilised for housing the refugees from Pakistan.

IMPACT OF ZAMINDARI ABOLITION ON SOCIAL LIFE

Prior to the enforcement of the U. P. Zamindari Abolition and Land Reforms Act, 1950 (Act I of 1951), in the district there were about 2,000 *mauzas* (revenue villages), divided into about 5,000 *mahals* (revenue paying units), four-fifths of which were held in zamindari. The bulk of this land was, again, held by petty proprietors. Of the large estates, which were not many, the prominent were the Gujar *muqarrari* of Landhaura with its three early branches of Thitki, Jharberi and Baledh, and the five small *talukas* of Kunja, Dadli, Talberi, Nagal and Deoband held by collateral branches; the estates of the five Jain (mostly of Saharanpur city) and eight other Vaish families; the Pundir (Rajput) Rana of Jasmaur; the Powell estate (owned by an European family), the Musalman zamindaris of Kailaspur and Kunjpurs, as well as those of the Pirzadas of Ambahta and Behat, the Turkomans of

Lakhnauta, the Pathans of Patehar, the Sheikhs of Rajpur, and the Raus of Sakrauda and Kheri. Some Hindu religious orders of mendicants belonging to Kankhal also owned considerable zamindaris. As regards cultivating tenures, about half the area was tilled by tenants-at-will who were ordinary tenants without any rights, about one-third was under *stir* or *khudkasht*, about one-sixth under occupancy tenants, and the rest under expropriatory tenants. Thus, the bulk of the peasantry comprised tenants who had no permanent or heritable rights in the land they cultivated and were at the mercy of their landlords. The latter, though apparently intermediaries between the government and the actual tillers of the soil, often harassed and exploited the peasantry. Their wealth, tradition and roots in the soil assured for them an influential position in the social and economic life of the district. In the villages there were two main elements, the zamindars and the farmers, and there was practically no rich and sturdy middle class. Life centred round the zamindar or a group of zamindars. Factional feuds and rivalries also abounded, particularly on the issues of rights in and possession of land. Many landlords maintained city residences in addition to their village seats, and the affairs of the zamindaris were often managed by their *karindas* (agents) whose treatment of the ryots was in many cases harsh. The big zamindars set the pace in social life and spent lavishly on entertainments, social and religious functions and their personal comforts and whims, a large number of traders and craftsmen catering to their needs. With the abolition of zamindari and the consequent emergence of new economic forces, the ease and luxury of the landed aristocracy came to an end, and many of them had to seek new avenues for earning their livelihood. Those who possessed *khudkasht* became *bhumidhars* of the land in question. All the cultivators also became either *bhumidhars*, *sirdars* or *asamis*. They are now masters of the land they cultivate, pay revenue direct to the government, do not have to render forced labour, their rights have been ensured and they no longer suffer from fear of ejectment or increase in revenue. The high prices of agricultural produce have also helped to improve their economic condition and social status. The plans of rural development and reconstruction have also gone a long way to help agriculture and the agriculturists.

The void created by the extinction of the zamindars in the rural areas has been filled up by a new village hierarchy which has come into being in the wake of the establishment of panchayats, Kshettra Samitis. These being elective bodies, party politics, sometimes manifested in the most debased and diabolical social norms, has engulfed the whole village life. Riots, murders, kidnapping, cheating, litigation over trifling affairs and unscrupulous methods for winning the elections have become common. The newly formed institutions have not so far fulfilled the hopes, aspirations and expectations of the framers of these august bodies.

Statement I—Area and Population										(Reference P. 78)	
District and tahsil	Area (sq. km.)			Population						1961	
	1971	2	3	1971	Male	Female	Persons	Male	Female	8	9
Saharanpur tahsil											
Total	5,526.0		5,506.1	2,154,834	11,28,485	9,26,349	16,15,478	8,85,109	7,30,369		
Rural	5,423.5		5,433.4	15,72,027	8,59,361	7,12,666	12,43,387	6,76,752	5,66,635		
Urban	102.5		72.7	4,82,807	2,69,124	2,13,683	3,72,091	2,08,357	1,63,734		
Nakur tahsil											
Total	1,702.4		1,573.1	6,55,237	3,57,794	2,97,443	5,38,483	2,92,319	2,46,164		
Rural	1,677.1		1,547.9	4,29,841	2,34,767	1,95,074	3,55,270	1,90,625	1,62,645		
Urban	25.3		25.3	2,25,396	1,23,027	1,02,369	1,85,213	1,01,694	83,519		
Deoband tahsil											
Total	1,074.6		1,072.1	3,54,156	1,93,665	1,60,491	2,79,883	1,52,163	1,27,720		
Rural	1,067.2		1,064.7	3,21,486	1,76,159	1,45,327	2,53,831	1,38,297	1,15,534		
Urban	7.4		7.4	32,670	17,506	15,164	26,052	13,866	12,186		
Roorkee tahsil											
Total	1,004.4		996.9	4,04,838	2,21,621	1,83,217	3,14,171	1,71,651	1,42,520		
Rural	995.0		987.6	3,53,647	1,93,581	1,60,066	2,74,312	1,50,021	1,24,291		
Urban	9.4		9.3	51,191	28,040	23,151	39,859	21,630	18,229		
Other tahsils											
Total	1,735.0		1,864.0	6,40,603	3,55,405	2,85,198	4,82,941	2,68,976	2,13,965		
Rural	1,674.6		1,833.3	4,67,053	2,54,854	2,12,199	3,61,974	1,97,809	1,64,165		
Urban	60.4		30.7	1,73,550	1,00,551	72,999	1,20,967	71,167	49,800		

1. There has been no jurisdictional change in the district during the decade. The difference in area figures is due to revised calculation of area done by the Board of Revenue.

2. According to Central Statistical Organisation the area of the district in 1971 was also 5,526 sq. km.

Statement II—List of Fairs

Town or village	Name of Fair	Date	Approximate attendance
Saharanpur Tahsil			
Kota	Kali Devi	Chaitra <i>sukla</i> 8	2,000
Raipur	Cattle fair	Chaitra	1,600
Bundki	Cattle fair	Vaisakha	2,000
Saharanpur M. B.	Gughal fair	Bhadra, <i>sukla</i> 10	60,000
Inderpurbhawan	Shakumbari Devi	Asvina, <i>sukla</i> 14 and Phalguna, <i>sukla</i> 14	1,00,000
Nakur Tahsil			
Shahjahanpur	Cattle fair	From 1st to 5th of every month	1,000
Aghiana <i>urf</i> Jamalgarh	Maha Mayee	Chaitra, <i>sukla</i> 14	1,500
Randewa	Piariyaji	Chaitra, <i>krishna</i> 6	2,000
Gangoh M. B.	Baba Haridas	Chaitra, <i>krishna</i> 14	4,000
Islamnagar	Burha Babu	Asvina, <i>krishna</i> 6	6,000
Gangoh M. B.	Shah Abdul Qaddus	Jamad-us-sani 22, 23	6,000
Deoband Tahsil			
Deoband M. B.	Devi Kund	Chaitra, <i>sukla</i> 14	2,000
Rankhandi	Shaheed Memorial	Asvina, <i>sukla</i> 14	5,000
Roorkee Tahsil			
Bhagwanpur	Cattle fair	Every month (27-28)	1,000
Hardwar M. B.	Kumbha Mela	After 12 years	20,00,000
Hardwar M. B.	Ardh Kumbha Mela	After 6 years	5,00,000
Pathri Forest	Peer Khala	Jaistha, <i>sukla</i> 15	2,000
Hardwar M. B.	Baisakhi	Vaisakha, <i>sukla</i>	6,000
Kaokhal	Shiva Barat	Sravana (Every Monday)	10,000
Lather Deva	Ganesh Chaudas	Bhadra, <i>sukla</i> 4	5,000
Garh Meerpur	Chuhar Mal	Asvina, <i>sukla</i> 5	4,000
Bhagwanpur	Deviji	Asvina, <i>sukla</i> 8	5,000
Hardwar M. B.	Kartiki	Kartika, <i>sukla</i> 15	2,000
Hardwar M. B.	Mansa Devi	Kartika, <i>sukla</i> 8	5,000
Hardwar M. B.	Lohri	Magh, <i>sukla</i> 15	25,000
Piran Kaliyar	Piran Kaliyar	Rabi-ul-Awwal 11-13	50,000

CHAPTER IV

AGRICULTURE AND IRRIGATION

The number enumerated as residing in the rural area of the district at the Census of 1971 was 15,72,027, representing 76.5 per cent of the total population.

Out of this total rural population 4,73,509 or roughly 30 per cent, were classified as workers and the remaining 10,98,518 as non-workers, i.e., females, children and other dependents. Out of those classified as workers 3,75,087, representing about 79 per cent, were engaged in agricultural pursuits, either as cultivators or agricultural labourers while the remaining 98,422 were those who followed non-agricultural occupations such as mining, quarrying, construction, trade, commerce, transport, manufacture, communications, etc.

These figures compare with those for 1961 as below :

	1961	1971
Total rural population	12,43,387	15,72,027
Workers in rural area		
(a) engaged in agricultural pursuits	2,40,797	3,75,087
(b) engaged in non-agricultural pursuits	1,87,443	98,422
Total	4,28,240	4,73,509
Total non-workers in rural area	8,15,147	10,98,518

LAND UTILISATION AND RECLAMATION

Cultivated Area

The earliest recorded figure of cultivated area in the district is that of the first regular Settlement of 1839, when it was 6,06,847 acres (2,45,582 hectares). The crop returns for the year 1869-70 give a total of 7,78,717 acres (3,15,136 hectares) under cultivation. This indicates very rapid progress, as indeed was only to be expected; for the district had suffered heavily in the past, at first from a faulty and unsympathetic revenue policy, and afterwards from the troubles of 1857 and the subsequent famine of 1860. Regular records of the cropped area are not extant before 1884-85, but by that time, inspite of the retardation caused by the scarcity of 1877, a very marked extension of cultivation had taken place, the total for that year being no less than 8,50,712 acres (3,44,221 hectares). The ten years ending with 1896-97 showed an average of 8,12,484 acres (3,28,802 hectares) under

tillage, though the figure would have been much higher but for the depression that set in about 1894, several seasons of unusually heavy rainfall being followed by the exceptional drought of 1896 and the resultant famine, which reduced the area in that year to 7,39,651 acres (2,99,327 hectares), the lowest recorded for perhaps the preceding fifty years. The recovery in the next decade was immediate and complete, the average figures of cultivated area being 8,59,290 acres (3,47,743 hectares). The statement below gives the decennial figures of cultivated area in the district from 1911 to 1961 and for the years 1968-69 and 1972-73 :

Year	*Cultivated area in acres/hectares	Per cent of total area
1911	8,57,570 (3,47,040.7 hectares)	62.16
1921	8,22,913 (3,23,021.5 hectares)	60.36
1931	8,39,109 (3,39,575.2 hectares)	61.90
1941	8,39,263 (3,39,637.5 hectares)	61.87
1951	8,62,878 (3,49,192.3 hectares)	63.58
1961	9,02,013 (3,65,031.3 hectares)	66.39
1968-69	9,09,784 (3,68,176.0 hectares)	66.81
1972-73	9,10,158 (3,68,327.0 hectares)	66.84

Culturable Land

Land under this category in the district includes all types of culturable waste, forests, groves, land prepared for sugar-cane, new or old fallow lands and land otherwise classed as waste due to sandiness, barrenness, *reh* infection, ravine-scouring or overgrowth of dhak and grass. In the beginning of this century nearly 3,53,012 acres (1,42,859 hectares) were covered by such land in the district. The statement which follows gives the decennial figures of culturable land in the district from 1911 to 1961 and in the years 1968-69 and 1972-73 :

Year	*Culturable land in acres/hectares
1911	3,64,540 (1,47,524.6 hectares)
1921	3,80,749 (1,54,084.2 hectares)
1931	3,56,102 (1,44,109.3 hectares)
1941	3,53,858 (1,43,201.3 hectares)
1951	3,32,153 (1,34,417.9 hectares)
1961	3,00,949 (1,21,790.1 hectares)
1968-69	2,78,080 (1,12,539.0 hectares)
1972-73	2,67,845 (1,08,393.0 hectares)

* 1 D.C. Handbook 1961—for years 1911 to 1961

2 Bulletin of Agricultural Statistics for U.P. 1969-70 for 1968-69 figures

3 District Land Records for 1972-73

The culturable area of 1,08,393 hectares during the year 1972-73 included 75,000 hectares under forests, 3,694 hectares under groves, 11,711 hectares under culturable waste, 718 hectares under pastures and grazing grounds besides the fallow land which measured 17,280 hectares. The same year barren and unculturable land in the district measured 7,550 hectares and the area of the land put to non-agricultural uses was 62,814 hectares.

Precarious Tracts

The natural drainage of the upland tract is generally adequate, though in places there are depressions, some of considerable extent, which have no sufficient outlet, and in which the land is either out of cultivation or else liable to damage by floods. Earlier the evil appears to have been slight, but it was aggravated by percolation from canals, by the construction of faulty escapes and by the obstruction caused by the canal embankments themselves and, to some extent, by railways and roads. The area worst affected by faulty drainage lay mostly in the western parganas, along the course of the Yamuna canal. A number of schemes to correct the faulty drainage were drawn up, and carried out in the seventies of the last century. Among the first of these projects to be completed were the cuts made to relieve the trouble caused by the old and ill-conceived channel of the Muhammadan canal. A drain nearly 8 km. in length was excavated in 1865 from the old canal close to Rampur, taking the surplus water into the Kirsani. A similar cut was made from Anantmau to the Katha, relieving the waterlogged area between the canal and the Tikraul distributary; and south of this the long Thola cut was constructed from Haidarpur to the Katha near Titron, effectively draining the large depression to the north of the latter place.

At the same time attention was paid to the rivers themselves. The Kirsani and the Katha were canalised and large extension of drainage works was made in these parts, with the result that the damage done to the land has since been greatly removed, although some of the water-ways are still inadequate to carry the volume of water passed into them during abnormally wet years. Much, too, has been done in the way of filling up hollows and depressions with the silt taken out of the canals, and every year one or two such lowlying patches are raised to the extent of one metre or more, thus materially reducing the percolation from the canals. Although the Katha drains have not been able to provide complete immunity from waterlogging the swamp area has certainly been reduced. The land reclaimed is not of much agricultural value and the rice tracts along the edges of the old marshes have deteriorated in quality.

Another large scheme in connection with the Yamuna canal was the relief of the Dhulapra and Kumharhera *jhils* in pargana Sarsawa by means of a cut from Tharauli on the canal through the *jhils* into the *khadir*. This did not follow the natural line of drainage, and the slope was insufficient

to carry off the water. Various improvements have been made from time to time, but the success of the scheme has been only partial.

The drainage of Saharanpur town and its neighbourhood was also a problem and called for action, as the site was notoriously unhealthy and the Dhamola and Pandhoi rivulets were too sluggish to carry off the large volume of flood water of their catchment area. About 1850 the cultivation of rice was prohibited within a radius 5 km. of the town. Later on the work of straightening and embanking the streams was completed. The canal department also took up improvements in the shape of cuts leading into the Dhamola and Nagdeo. Much again was effected in the waterlogged lands in the north of Sultanpur and the south of Faizabad, where an immense marsh was greatly reduced by the excavation, in 1862, of eight cuts with an aggregate length of 18 km., carrying the surplus water into the Maskara. Drains totalling a length of 320 km. have been made in the area commanded by the Yamuna canal in the district.

Still there is a lot to be done in this sphere; the Sultanpur swamps are still ill-drained, the Dhulapra and Kumharhera *jhils* do much damage in wet years; the railway line seriously interrupts the natural drainage between Sarsawa and the Yamuna, with disastrous results to cultivation in the *khadir*; and there are yet several villages, such as Naiabas, Ismailpur and Bijupura, in pargana Saharanpur, which are extensively inundated in years of heavy rainfall.

In the central portion of the district the drainage trouble is slight and is practically confined to a few villages in the Haraura and Bhagwanpur parganas, in which the water is held up by the railway embankment. Further south, however, in the vicinity of Deoband, a serious difficulty has long been encountered owing principally to the direction taken by the Deoband branch canal, which runs transversely to the natural slope of the country. The utilisation of the Imlia for carrying off the surplus water from the town had somewhat disastrous results, and many supplementary works were undertaken, the most important being the cut excavated in 1902 from the Sakhan *jhil* to the Hindan, which relieved a very large area on both sides of the canal, while further measures were afterwards carried out by the Deoband municipality. In the east of the pargana and in Manglaur much had to be done to correct the obstruction caused by the canals and distributaries, the chief drainage work being the deepening of the Sila by giving that stream a uniform slope from the point where it is crossed by the Sidhauri distributary to its confluence with the Kali Nadi. This was completed in 1877, and subsequently a number of drains were excavated in order to relieve the lands east of the river. The town of Manglaur, on the east bank of the Ganga canal, suffered greatly from percolation till a system of drains was completed about 1875, and this was extended in 1886 so as to

benefit the eastern parts of the town. The total length of drains made by the canal department in the central and eastern upland generally commanded by the Ganga canal and its branches is nearly 160 km.

The worst-drained portion of the district is the Ganga *khadir*, especially in the Pathri swamps and its vicinity, and the lands to the south. Pathri forest which is ill-drained is a valuable grazing reserve, but it might well be possible to improve the neighbouring lands. The railway line too, obstructs the drainage in many villages, and the valley of the Solani has always been very precarious and subject to waterlogging. In 1879, a drain was made with the object of reducing the Landhaura swamps and improving the lowlands along the Solani; but the object has not been fully attained.

Soil Conservation

The area of land in the district estimated to be worst affected by soil-erosion was nearly 2,30,318 hectares in 1971-72. Centuries of neglect and cutting down of trees and bringing of more and more land under the plough have resulted in deep ravines. Water erosion is mainly noticeable in the northern part of the district because of the slopy nature of land, light soils and high rainfall intensity. Besides, sheet erosion, rill and gully erosion and stream bank erosion are also assuming alarming proportions in the Muzaffarabad, Bhagwanpur and Sadholi Kadim development block areas and the sub-Siwalik region of the district.

The steps taken by the irrigation department during the closing years of the last century for improving the drainage of the precarious area of the district, given in detail in the preceding pages, served to some extent to conserve the soil but the magnitude of the problem necessitated intensive action in this direction.

The agriculture department of the State has taken up programme of soil conservation and established a unit at Saharanpur in 1964-65 and another at Roorkee in 1969-70. The programme is comprehensive and lays emphasis on an integrated approach of change from negligent and wasteful use of soil and water resources to intelligent, scientific, protective and fruitful purposes. The methods applied to achieve this end are the contour bunding, making of check-dams, levelling, contour sowing, planting of grass on bunds, strip and cover cropping, hot weather cultivation and showing of crops which take a longer time for ripening like *arhar*, castor and *tor*. These agronomical practices provide a thick canopy on the land and are helpful in checking action of rain on the soil and thus reducing the chances of its erosion.

Afforestation is also an important and effective method of conservation of soil and water. The land which is ravined, gullied and unfit for cultivation, menaced by the eroding action of the Yamuna, Ganga and other rivers has been divided into six blocks under these units and has been

afforested. From 1964-65 to 1968-69, nearly 232.15 hectares of such land has been planted with trees. The forest department has also undertaken afforestation work to promote soil conservation particularly in the foot-hills of the Siwaliks and between the years 1961-62 to 1965-66 in the Third Plan period an area of about 700 hectares was afforested with various kinds of trees.

Between the year 1964-65, when the soil conservation programme was taken up in the district, and 1970-71 more than 26,642.6 hectares of land has been reclaimed and saved from soil erosion and nearly 26,04,455 metres of contour bunds have been constructed in the areas mostly affected by this menace.

IRRIGATION

The canals constitute the major source of irrigation in the district, but there are considerable stretches of country which are not reached by the canals and have to depend on wells and *jhils* and ponds. In the submontane belt (the Siwalik region), owing to the immense depth of the water level, the construction of wells is impossible and the rapidity of the slope affords no opportunity for the collection of the surface drainage in pools and depressions. This tract has consequently to depend wholly on the rainfall, which in normal years is much heavier than in the south, but a failure in the rains means excessive loss of crops. On the other hand, irrigation is seldom required in the lowlands of the Yamuna and Ganga, where the water level is very high and the soil retains sufficient moisture for the spring crops. Where necessary wells can also be dug for watering the superior staples, although in some parts of the Roorkee tahsil the shifting nature of the sandy subsoil renders their excavation impossible. The figures of irrigated area in the district are extant from 1884-85 onwards, in which year 97,495 acres (39,450 hectares) or 11.46 per cent of the cultivated area, were recorded as irrigated. The average proportion for the next two years was 12.65 per cent. From 1887-88 to 1895-97 the annual average was 1,13,920 acres (46,100 hectares) or 14.12 per cent of the area cultivated, the figures ranging from 54,846 acres (22,196 hectares) in the unusually wet season of 1894-95 to 1,88,923 acres (76,455 hectares) in 1896-97, a year of general drought. This famine appears to have had an immense effect on irrigation in all its branches, for subsequent years witnessed little diminution in irrigated area in the district. The average for the ensuing decade was 1,56,562 acres (63,360 hectares) or 18.32 per cent of the cultivated area. The total exceeded 2,00,000 acres (80,934 hectares) in 1906-07, while the maximum was reached in 1899-1900, another dry year, when irrigation extended to no less than 2,21,638 acres (89,700 hectares) or 27.04 per cent of the total cultivation. The following statement gives the decennial figures of gross irrigated area in the district from 1911 to 1961 and in the years 1968-69 and 1972-73 :

Year	*Gross area irrigated acres/hectares	Per cent of gross cropped area
1911	1,57,880 (63,892.2 hectares)	14.7
1921	2,07,892 (84,130.9 hectares)	21.2
1931	2,17,250 (87,918.2 hectares)	20.8
1941	2,53,217 (1,02,472.8 hectares)	23.7
1951	2,69,615 (1,09,108.9 hectares)	25.4
1961	2,86,996 (1,16,952.1 hectares)	23.0
1968-69	5,38,900 (2,18,085.0 hectares)	41.6
1972-73	6,90,282 (2,79,349.0 hectares)	50.6

The table below indicates the area (in hectares) irrigated under principal crops in 1911 and 1971 :

Year	Paddy	Wheat	Palras	Sugar-cane	Cotton
1911	18,473	24,660	575	11,570	895
1971	63,330	1,18,702	2,732	58,743	1,502

Means of Irrigation

The district made great strides in the direction of immunity against drought during the closing quarter of last century and it has been made possible largely on account of the extension of the facilities of irrigation by the canals. In 1884-85 canals supplied water to 71,916 acres (29,100 hectares) during the next two years the average was 75,266 acres (30,460 hectares) and for the following decade it was 80,724 acres (32,668 hectares). For the ten years ending 1906-07 it was no less than 1,21,550 acres (49,190 hectares) annually.

This increase however, was not accompanied by any diminution in the area irrigated from other sources like wells, *jhils*, etc. It is true that in the canal-irrigated tracts wells have largely gone out of use, but elsewhere the stress of scarcity taught the cultivators to rely more than ever on wells, and to make the fullest use of the streams and natural reservoirs. The area

* 1 D.C.H. 1961 for 1911 to 1961

2 Bulletin of Agricultural Statistics for U.P., 1969-70 for 1968-69 figures

3 District Land Records for 1972-73

watered from wells, which from 1884-85 to 1886-87 averaged 25,747 acres (10,420 hectares) rose to 28,984 acres (11,730 hectares) in the next ten years, while in the decade terminating in 1906-07 it was as much as 43,878 acres (17,757 hectares). The corresponding figures of the total area irrigated from *jhils*, tanks, and other sources during the same periods were 3,433 acres (1,390 hectares), 4,212 acres (1,703 hectares) and 5,583 acres (2,258 hectares) respectively. Irrigation from wells is most extensively practised in the tracts of the Nakur tahsil that are beyond the reach of the canal distributaries, and in pargana Nagal ; while the *jhils*, tanks and streams are utilised to a limited extent in all parts of the district. The statement below gives figures of the net areas* irrigated from various sources in the district in 1951-52, 1961-62, 1968-69 and 1972-73 :

Year	Area irrigated from wells (including tube-wells) (in hectares)	Area irrigated from canals (in hectares)	Area irrigated from other sources (in hectares)
1951-52	35,713.0	72,155.4	895.1
1961-62	40,172.7	72,478.3	346.4
1968-69	84,657.0	81,510.0	464.0
1972-73	1,25,123.0	79,921.0	456.0

Wells—The wells used for the purposes of irrigation are mainly of the unprotected type, though these have the disadvantage of collapsing after a short term of existence, their life depending on the nature of the subsoil. In the uplands of the Nakur tahsil they last from one to three years, and in the country about the head-waters of the Katha, Hindan and Kali Nadi they have to be strengthened by a circular framework of roughly-hewn planks, usually of dhak wood, loosely fitted together and kept in their place by a wattling of *hajra* stalks, though even with these elaborate precautions they seldom last for more than four years. In portions of Bhagwanpur pargana this wooden lining is carried right up to the level of the soil, and wells protected in this manner go by the name of *kathkui*. In many parts of the Roorkee tahsil wells can not be dug, in spite of the proximity of water, since at a little depth quicksand is met with ; and indeed the only tract east of the Hindan in which wells are successful is the strip running down the centre of Nagal and Deoband. Masonry wells, of course, can be made ; but the expense is generally prohibitive, though there has been a great increase in their numbers of late years. In the days gone by wells were almost exclusively worked by the *charas* or leathern bucket drawn by men or

*1 Season and Crop Report for 1951-52

2 Bulletin of Agr. Sts. for 1961-62 and 1968-69

3 District Land Records

bullocks ; but of late the *rahats* or Persian wheels and pumping sets operated by electricity or diesel oil are commonly employed. In the *khadir* tracts the wells are mere water-holes known as *ogals*, and these never last more than a single season.

There were 10,000 pakka and 850 kutchha wells in the district for providing irrigation in 1951-52. In 1961-62 they numbered 10,300 and 1,577 respectively. In 1972-73, the number of pakka wells had remained more or less constant though the kutchha wells reached an insignificant figure of 44 only. According to the revenue records the area irrigated by wells in the district was 18,738 hectares in 1972-73.

During the British rule in the country much headway was made in the field of opening new and reliable facilities of irrigation and a number of gigantic projects like the Ganga canal and Yamuna canal were completed in this portion of the country. This district, luckily, has reaped benefits from both of these canal systems. But these facilities did not prove adequate to the needs of the cultivators. The economic condition of the peasantry did not allow them to make provision for their own private arrangements for the purpose of irrigation, like construction and boring of wells, and installation of *rahats* and pumping sets on them.

After the attainment of freedom, the government has under its successive Five-year Plans not only taken up construction of State tube-wells but has also provided liberal assistance to the cultivators for setting up their own private minor irrigation works like the installation of pumping sets and *rahats* (Persian wheels) on the wells.

A total of 381 State tube-wells were constructed in this district by the government from 1951-52 to 1972-73 the planwise break-up being 103 in the First, 52 in the Second, 98 in the Third and 128 in the Fourth Five-year Plan periods. The number of State tube-wells which were used for irrigation in 1972-73 was 309 and an area of 24,112 hectares was irrigated by them.

There were only 217 private tube-wells or pumping sets in the district at the end of the Second Five-year Plan. During the period covered by the Third Five-year Plan and the Fourth Plan (up to 1971-72) with liberal financial help from the government to the cultivators to enable them to construct their own tube-wells or instal pumping sets in the wells, nearly 14,483 such wells were completed. During the same period 3,224 wells were bored and 3,169 *rahats* installed by the cultivators for which also financial assistance was provided by the government.

The government target of financial assistance for minor irrigation in this district in the Fourth Plan period is 604 lacs.

The Agricultural Refinance Corporation scheme for accelerating minor irrigation programmes, has also been taken up in the district since 1968 and

till the end of the first phase of this scheme in June 1973, government distributed nearly Rs 40 lakhs as loan to the cultivators and nearly 750 tube-wells and wells with pumping sets were completed. Encouraged by this success a sum of Rs 421 lakhs is proposed to be spent on minor irrigation works under this scheme in the district in the next three to four years. In 1972-73 the area irrigated by private tube-wells alone was 82,273 hectares while other minor works of irrigation provided water to an average area of 15,300 hectares of cultivated area.

Canals—Of the two main lines of canals the eastern Yamuna canal has the prior claim to notice, being one of the few great irrigation works that can trace their existence to a period antecedent to British rule. It is said to have been originally designed by Ali Mardan Khan in the days of emperor Shahjahan, though more probably its construction was not effected till the reign of Muhammad Shah. Its alignment was faulty, and no great stream of water could have been carried down the channel for any lengthened period; and it is certain that the works were abandoned in the time of Ahmad Shah. There is a tradition that Zabita Khan reopened the canal and brought water as far as Ghausgarh in Muzaffarnagar; and one story relates that in this way much damage was done to the towns of Behat and Saharanpur. In 1809 Lieutenant James Tod was deputed to survey the canal and this work was completed in the following year. Nothing was done, however, and a fresh examination by Major J. A. Hodgson in 1814 showed that the channel was obliterated in many places and elsewhere was covered with jungle. A third survey was made in 1822 and the work of reconstruction was estimated to cost Rs 2,03,633. Col. Cautley who was in charge of the project at that time got the canal completed, which was opened for irrigation on January 3, 1830 and a total sum of Rs 4,37,966 was spent. The Raipur, Alampur, Gandewar and Behat distributaries take off the right bank of the canal. At Kalsia, nearly 25 km. from the headworks, the Nagla distributary leaves the left bank and passes through pargana Saharanpur, giving off Lakhnauta, Chandauli and Piki minors. A short distance below this is the Randaul distributary on the right, traversing pargana Sultanpur, also giving off the Alipura minor which irrigates the land between the Randaul and Pilkhani distributaries and the Dasra-Mazra minor, both on the left bank; in the 30th km. comes the Babail on the left, discharging into the Nagla; and in the 32nd km. the Pilkhani on the right, joining the Randaul and continuing through pargana Sarsawa. Next come the small Sarkari and Shahpur channels on the left. Near Halalpur, the Tharauli and Mcgchhappar distributaries leave the canal on the right and left bank respectively, the former passing along the borders of Saharanpur and Sarsawa into Nakur, where it gives off the Balpur and Islamnagar distributaries as well as several minors; while the latter runs through the centre of Saharanpur into Rampur. Next come the small Rupri minor on the right and the Manakmau, Chidbana and Kirsani on the left bank. At Reri, the 48th km., the Nalhera and Reri distributaries leave

the left bank, the former picking up the Megchhappar and running southwards through Rampur as far as Jarauda, where it joins the Kallarpur; while the latter irrigates the country between the Nalhera and the canal uniting at Rampur with the short distributary of that name. Some distance below is the head of the Hangauli on the right bank, and this passes into the Muzaffarnagar district, giving off a branch at Tikraul; and at the same point the Kallarpur leaves the canal on the left, to pass through the south of Rampur into the adjoining district. A third is the Sijud, which keeps parallel to the canal on the east as far as the boundary of Muzaffarnagar, and gives off the Olra, Nanauta and several other smaller channels. The others are the Salempur, Papri and Bunta distributaries on the right bank, irrigating the south-east corner of Gangoh. Just below Kuakhera on the southern borders of Saharanpur, the upper division of the canal terminates. The total length of the main canal and its smaller distributary channels in this district was nearly 645 km. in 1972. A number of projects have been completed on this canal which tend to increase its capacity of irrigation from 3,000 to 4,000 cusecs. For this purpose many new channels have also been constructed. These works have been taken up since the start of First Five-year Plan and up to the year 1971-72 an estimated amount of Rs 1.34 crores has been spent thereon. There are also plans to reconstruct the Tajewala headworks of the canal. The irrigation capacity of the canal will also further increase after the completion of the Yamuna valley project in the district of Dehra Dun, work on which is in progress at present.

Ganga Canal—The success of the Yamuna canal directed attention to the possibility of utilising the Ganga in a similar manner. In 1836 a survey of the country above and below Hardwar was made and in 1839 again Colonel P. Cautley undertook a close examination of this area. His first idea was to connect the Banganga with the Kali Nadi from Badshahpur to Ranipur which was later found to be impracticable. He then proposed to adopt a direct line from Hardwar to Roorkee, though this involved an aqueduct over the Solani. His original estimate was for a canal (256 miles) 411.9 km. in length with (73 miles) 117.4 km. of subsidiary channels to be constructed at a cost of 26 lakhs of rupees. The project was sanctioned by the government in 1841 and soon the work was started. The canal was opened on April 8, 1854. Improvements were carried out from time to time and by 1861-62 full supply of water in the canal was admitted. Certain defects were noticed, the chief being the excessive gradient which caused much erosion of the bed and sides of the canal. It was suggested to improve the slope by constructing additional falls and at the same time to carry out works connected with navigation in the canal at a total cost of Rs 36,63,411. The amount was revised and estimated at Rs 94,06,664 in 1881. The remodelling of the canal was spread over a considerable period and terminated in 1894 notably the construction of the Deoband branch and the improvement of the headworks at Mayapur near Hardwar.

The Ganga at Hardwar is divided into separate channels by several islands. One of these channels leaves the main stream some 3 km. above Hardwar and passes close to the town, carrying about one-third of the total volume of water. It then takes an easterly direction, past Jwalapur, crosses the Ranipur torrent by a superpassage. A similar superpassage crosses the Pathri Rau in the 14th km., but further on, at Dhanauri, the canal has to cross the much larger the Ratmau Rau. From Dhanauri the canal flows in a straight line towards Roorkee, taking a south-westerly direction. From Roorkee the canal bends to the south and maintains this direction past Manglaur to the borders of the district, its total length within the district being (30 miles) 48.2 km.

A short distance above Manglaur, the Deoband branch leaves the canal on the right bank and taking a south-westerly direction passes through the parganas of Manglaur and Nagal as far as the railway line, where it bends southwards through Deoband, following the line of the watershed to the east of the Hindan. Its total length in the district is about 40 km. The canal has to cross the Sila and the Kali Nadi through aqueducts. Numerous siphons, too, had to be constructed so as to admit of the passage of the cross-country drainage. Actually the bulk of irrigation in the district is provided by this branch. It gives off the Gadarjuda distributary on the right bank, and then comes the old right main distributary of the canal, passing south through Manglaur and Deoband into Muzaffarnagar district. Next comes the Sidhauri distributary, a channel of considerable length, serving the country between the Sila and the Kali Nadi; then the Manjhaul and Salauni minors; and then the Bastam distributary, west of the Kali, giving off the Deoband minor. Further on are the Asadpur, Sakhan, Kulsat and Rankhandi minors on the left bank, and the Bhailal, Ambahta and Malhera on the right, supplying the western portion of the Deoband pargana.

Irrigation in Jwalapur and Roorkee parganas is effected by means of small distributaries from the main canal. They are the Kankhal and Jagjitpur, the latter also supplying the Panjanheri minor. Then come the Ibrahimpur, Ahmadpur, Bahadurabad, Manoharpur and Kherli minors. Just beyond the head of the Deoband branch the Tansipur distributary takes off on the right of the main canal and runs parallel to it through pargana Manglaur and gives off the Tikaula minor. On the left of the canal near the same point leaves a main distributary irrigating the eastern half of pargana Manglaur with the aid of Manglaur and Libarheri minors. Near the borders of the Muzaffarnagar district the right and left Muhammadpur distributaries take off, but they are of no use to this district. The total length of the main canal and its smaller channels in the district was nearly 369 km. in 1972.

AGRICULTURE INCLUDING HORTICULTURE

Soils

The surface soil found in the Siwalik region is generally a thin vegetable deposit, bearing a crop of sal, *sain* and other trees, with *chir* on the higher altitudes and on the northern slopes. In the submontane or the *bhabar* tract the soil is light and shallow resting on a deep stratum of stone and boulders which frequently rise to the surface. Though it appears to have exhausted to some extent, it is fairly fertile, producing good quality of sugar-cane and also wheat, cotton and other staples. Below the *bhabar* lies a narrow belt of terai with moist and alluvium deposit. In the upland tract the soil along the banks of river beds is usually light and sandy, while elsewhere it is mainly a productive loam stiffened by the action of water into clay in the lower levels. All along the old high bank of the Yamuna lies a belt of stiff swampy clay of varying width producing excellent rice but elsewhere the Yamuna *khadir* consists of light loam and in places includes patches of sand and *reh*. The soil in the Ganga *khadir* ranges from almost pure sand in the ridges between the various torrent beds to the stiff clay of the numerous swamps.

As early as the close of the last century the distinction of natural soils were more or less disregarded and the classification of soils made for assessment purposes depended on the absence or presence of irrigation facilities.

In recent years due to the demand for more food-grains to feed the increasing population coupled with the absence of much scope for bringing additional land under the plough, the farmers cultivate even the most inferior type of soils by adopting the latest scientific methods of cultivation. They enrich the soil by replenishing it with organic manures and chemical fertilizers and sow the seeds of high-yielding varieties. Nevertheless several varieties of natural soil are generally recognised, though, of course, in no case can any hard and fast line of demarcation be drawn between one soil and the next. The light rich loam or sandy loam soil covers nearly three-fourth of the area of the district. It is called by the local name of *rausli* and ranges from a light friable soil with a considerable admixture of sand to the softer kinds of clay, in which all crops can be grown with equal facility. Muzaffarabad and Sadoli Quadim blocks in the north, Sarsawa, Nakur and Gangoh blocks in the west, Roorkee, Bahadrabad, Bhagwanpur and Laksar blocks in the east and Baliakheri, Nagal, Rampur and Deoband blocks in the middle and south of the district abound with this type of soil. Heavy clay, found principally in the depressions, is here known as *dakar*, a name that is generally used in the upper doab and corresponds with the *matiyar* of other districts. It is found in portions of Nagal, Bahadurabad, Roorkee, Laksar, Rampur and Deoband blocks. It is most suited for rice cultivation, though with an adequate rainfall and good tillage it also produces other crops with success. As elsewhere, the light soil found on the

higher levels containing more than 75 per cent of sand, is called by the ordinary name of *bhur*. This covers but a small area and is of little value for agricultural purposes, generally producing nothing more than a modest rainy season crop. It is usually found along the banks of the rivers, the Ganga in the east, covering eastern portions of Bahadrad and Laksar development blocks and the Yamuna in the west covering western parts of Sadoli Quadim, Nakur and Gangoh blocks. The catchment area of the Hindan, Solani, Banganga, Pathari, Ratmao and other smaller rivers also abounds with this kind of soil. The sandy soil is found in long ridges, particularly in Manglaur and Deoband parganas, where it is known as *ghur*. With the aid of irrigation it produces Rabi crops of fair quality, but otherwise is practically useless. Frequently the worst description of *bhur* is termed *bhunda* or *bhua*, a name which in the adjoining district of Muzaffarnagar is practically synonymous with *bhur*, though the term is frequently applied in a deprecatory manner to any unirrigated tract, and is also used to distinguish the higher parts of fields from the *dakar* or lowlying depressions.

The soils of the submontane tract exhibit some peculiarities, especially in the north-west, where the high terraces between the torrent beds often possess a dark, chocolate-coloured soils which is extremely productive where the deposit is of some depth. This soil is also found in scattered places in the central part of the district, though it varies in quality and towards the east is replaced by an alteration of sand and a light soft clay. The highly manured and well-cultivated fields that immediately surround the village site are conventionally known as *mlsan*, corresponding to the *bara* and *goind* of other districts towards the east.

Harvests

The mode of cultivation in the district is similar to that which prevails throughout in the doab. Harvests are known by the usual names, the Kharif, Rabi and Zaid. The Kharif crops are sown in the beginning of the hot weather and reaped after the cessation of the rains; the Rabi crops are sown in October-November and harvested in March-April. The Zaid or intermediate crops comprise a few minor crops like melons, vegetables, spices and tobacco and cover a very small area. Melons are mostly grown on the sandy banks of the rivers. The relative figures of area occupied by the Kharif and Rabi crops in the district are as follows :

Year	Area under Kharif in acres/hectares	Area under Rabi in acres/hectares
1869-70	4,40,937 (1,78,441.2 hectares)	3,83,394 (1,53,23.4 hectares)
1902-03	5,64,681 (2,28,518.6 hectares)	5,32,020 (2,15,31.1 hectares)
1931-32	5,19,401 (2,10,194.3 hectares)	5,69,382 (2,30,501.6 hectares)
1961-62	7,20,527 (2,91,387.3 hectares)	5,50,509 (2,22,762.9 hectares)
1968-69	7,37,015 (3,06,334.0 hectares)	5,33,642 (2,15,96.0 hectares)
1972-73	7,82,197 (3,16,545.0 hectares)	5,78,270 (2,34,016.0 hectares)

The double-cropped area, more correctly the area cropped more than once in a year (*dofasli*), covers a sufficiently large area in the district. The figures of 1869-70 give a total of 33,940 acres (13,800 hectares) as double-cropped area, by 1884-85 it had risen to 1,54,053 acres (62,344 hectares) and in the next ten years the average was 1,65,482 acres (66,970 hectares). For the decade terminating in 1906-07 the average double-cropped area was 2,15,230 acres (87,100 hectares). In 1931-32 it covered 2,48,142 acres (1,00,420 hectares), in 1961-62, the district had 3,62,820 acres (1,46,827.9 hectares) under double-cropping and in 1972-73 this area increased to 1,83,383 hectares. A good deal depends on the nature of the soil and the character of the crops grown. Double-cropping is mostly practised in those parts of the district where much of the land is ordinarily under sugar-cane, *arhar* or rice.

Principal Crops

Kharif—The main crop of this season is rice. It was sown in an area of 1,27,294 acres (51,514 hectares) in 1906-07. This may be contrasted with the 72,644 acres (29,400 hectares) sown in 1869-70. The proportion varies in different parganas of the district, the notable ones being Sultanpur, Rampur, Manglaur, Haraura and Bhagwanpur. On the other hand there is very little rice in the submontane parganas, notably Faizabad and Muzaffarabad. There are two main harvests of rice grown in the district, the early one known as *kuari*, and the late one, as *jarhan*. The former is sown late in June or early July and a good harvest depends on the adequacy of rainfall. After its harvest, the fields are prepared for sowing the Rabi crops like wheat, barley, gram and pea. *Jarhan* is sown after the commencement of the rains. The plants are first raised in specially prepared nursery beds and on attaining a height of nearly 15 cm., they are transplanted in properly prepared fields. The crop is reaped in November, whereafter the fields usually lie fallow during the Rabi season. The two main varieties are subdivided into an almost infinite extent, and it is not possible even to enumerate the different species. The best of all is that known as *chahora*, distinguished by its long dropping ears, which is grown in the *dakar* tracts of Sultanpur and in the villages lying along the old bed of the Yamuna. A great reputation also is held by the rice produced along the Katha in the Nakur tahsil, that grown around Titron being especially celebrated. In 1969-70, the total area occupied by rice in the district was 84,947 hectares, the total production amounting to 1,13,020 tonnes. The area under it rose to 89,907 hectares in 1972-73.

A notable feature of the agriculture of the district is the great increase of area under maize. It was sown in an area of 45,250 acres (18,300 hectares) in 1891, increased to 83,430 acres (33,760 hectares) in 1906-07, 37,756 hectares in 1969-70 and 39,309 hectares in 1972-73. Its total production amounted to 29,236 tonnes in 1969-70. The crop is cultivated without difficulty and yields a profitable return, but its greatest advantage lies in the

fact that it is among the first to reach maturity, and consequently is less liable to suffer from an early cessation of the rains, while at the same time it leaves the ground free for preparation for the Rabi while other crops are still standing. Maize is grown most extensively in the submontane parganas and the Nakur tahsil. At present various high-yielding varieties of maize evolved at Pantnagar and other agricultural research centres are grown here.

In the inferior soils and the narrow strips of sandy land along the river banks jowar and *bajra* are the main Kharif staples which are grown. In the beginning of the present century the former was a favourite crop in the district. It occupied a place second only to rice, being grown in an area of 1,13,520 acres (45,940 hectares) in 1906-07, though most of it was sown in combination with *arhar*, and much too was grown solely for fodder. Cultivation of jowar has shown a very fast decreasing trend in the district. By 1951-52, the area under jowar came down to only 3,291 acres (1,332 hectares) and in 1969-70 it had become as insignificant as only 148 hectares were sown with it. *Bajra* has also not fared better than jowar in this respect. It was sown in 69,181 acres (28,000 hectares) in 1906-07, coming down to 59,941 acres (24,257 hectares) in 1951-52, 14,023 hectares in 1969-70 and only 9,454 hectares in 1972-73. Poor soils of northern parganas are most suited for *bajra* and it is also sown mostly mixed with *arhar*.

Among other Kharif cereals, *sawan* and *mandua* and pulses like *urd*, *moth* and *moong* may be mentioned. *Sawan* and *mandua* were some of the favourite Kharif crops in the past. But the incentive of fetching better prices has resulted in recent years in large changes in the pattern of agriculture in the district. The inferior cereals like these have yielded place to the more valuable crops like rice, maize or sugar-cane. In 1972-73, *sawan* covered 415 and *mandua* 123 hectares only in the district.

Of the Kharif pulses, *urd* made the district stand second in the whole of the Meerut Division in 1969-70 when it was sown in 1,216 hectares. *Moong* and *moth* occupied 38 and 13 hectares respectively in that year. The three pulses occupied 1,283 and 21 and 17 hectares respectively in 1972-73.

Rabi—Wheat is the most important of the Rabi staples in the district. The crop requires a good soil, careful tillage and an assured supply of irrigation, so that it practically monopolises the bulk of the best loam. In all the parganas it constitutes the chief product of the spring harvest, but the proportion varies to a considerable extent in different parts. Throughout the southern and south-western parts constituting the Deoband and Nakur tahsils the general average is largely exceeded than elsewhere in the district. In the inferior soils which are yet capable of producing wheat, the crop is often sown in combination with barley and gram, forming the mixture

locally known as *gochai*. The parganas of Saharanpur, Roorkee and Jwalapur have comparatively larger area under *gochai*. Of this combination that of wheat and gram is more popular.

Fields for wheat cultivation are manured with compost at the end of summer, before the commencement of rains. During the dry intervals, they are ploughed a number of times and finally sown around October. The first watering is done in November when plants attain a height between 3 cm. and 4 cm. In years of good winter rains, only two or three more waterings are sufficient for an average harvest, otherwise the fields have to be irrigated at least five to six times. Harvesting commences in the later half of March and continues throughout April and, in some areas, even May. Wheat occupied 2,51,456 acres (1,01,760 hectares) in 1891, increased to 3,10,279 acres (1,25,566 hectares) in 1951-52, 1,49,993 hectares in 1969-70 and 1,84,379 hectares in 1972-73. Of late following the successful introduction of the Mexican varieties in the country a number of improved and high-yielding varieties of wheat evolved at Pantnagar agricultural university and other research centre the cultivators are fast adopting them in place of indigenous breeds. In 1969-70 the total wheat production in the district amounted to 1,99,043 tonnes.

Barley is confined to the light soils in which means of irrigation too are not available. The highest proportion is to be found in Sultanpur and Jwalapur parganas. The area under this crop has decreased of late, and this may be taken as a favourable sign, indicating the replacement of the inferior grains by the more valuable staples. In the beginning of the present century it occupied an average area of 21,000 acres (8,500 hectares) sown alone and more than 2,00,000 acres (80,937 hectares) where it was grown mixed with wheat or gram. By the year 1951-52 the area under barley shrank to 18,000 acres (7,285 hectares) and in 1972-73 it was sown in 1,802 hectares only.

The remaining Rabi area is taken up for the most part by gram. It is sown on every kind of soil, with or without irrigation, and commonly follows some Kharif staple as a second crop.

Generally gram is sown mixed with wheat or barley and sometimes with both. In 1869-70, the area under gram was 49,629 acres (20,080 hectares), in 1891-92, it rose to 88,420 acres (35,780 hectares), in 1951-52, it further increased to 1,24,947 acres (50,560 hectares) and in 1969-70, it covered 24,108 hectares in the district with a total production of 14,195 tonnes.

Pea is also grown in a small area in the district. It also thrives in all kinds of soils like gram except that it is more susceptible to frost. In 1961-62, the area covered by pea was 15,766 acres (6,360.3 hectares) and in

1969-70, it occupied 4,494 hectares, the total production being 2,486 tonnes in the latter year.

Of the Rabi pulses only *arhar* and *masur* are important. An interesting feature of *arhar* is that it is sown with the main Kharif crops and harvested after most of the Rabi crops. This is, perhaps, why it is hardly ever sown as a single crop, being usually combined with jowar or *bajra* which are harvested by November-December, leaving it standing alone in the fields. In 1961-62 *arhar* covered 1,169 acres (473.1 hectares) which, however, went down to 491 acres (198.7 hectares) in 1967-68 and 201 hectares in 1969-70 with an estimated production of 339 tonnes in this year.

The district has a leading position in the cultivation of *masur* in the whole of Meerut Division. It was sown in 13,996 acres (5,663.9 hectares) in 1961-62 and in 13,996 acres (5,663.9 hectares) in 1961-62 and in 4,423 hectares in 1969-70, total production being 2,658 tonnes in the latter year. The area under *masur* increased to 5,864 hectares in 1972-73.

The following statement gives the figures of average yield per hectare in quintals of the main Kharif and Rabi cereals in the district in the year 1969-70 as compared with the corresponding figures of the State averages during the same year :

Cereal	Average yield in district	Average yield in State
Kharif :		
Rice	13.30	7.56
Jowar	2.40	5.95
Bajara	4.28	7.26
Maize	7.74	7.85
Urd	3.55	4.15
Moong	3.32	3.28
Moth	4.25	4.25
Rabi :		
Wheat	13.27	11.90
Barley	10.37	10.14
Gram	5.89	8.04
Pea	5.53	8.52
Arhar	16.87	11.98
Masur	6.01	5.28

Non-food Crops

The main non-food crops of the district are sugar-cane, cotton, oil-seeds, ground-nut, potato and other vegetables and fruits, sunn-hemp and tobacco.

Till the close of the last century, the district had a large area under indigo cultivation. Here, as elsewhere, its decline has followed on the depreciation of the value of the crop consequent on the competition of chemical blue dye manufactured in Europe and elsewhere.

Cotton was also a crop of considerable importance in the district in the days gone by. It covered 42,349 acres (17,140 hectares) in 1906-07, and the northern parganas were notable for its cultivation. It has ever since then shown a declining trend, covering 16,401 acres (6,637 hectares) in 1951-52, 12,307 acres (4,980.4 hectares) in 1961-62, and only 4,315 hectares in 1972-73.

Sugar-cane is one of the most important non-food Kharif cash crops of the district. Its area has been consistently showing an increase. In 1869-70, it was sown in an area of 24,421 acres (9,880 hectares) rising to 37,492 acres (15,170 hectares) in 1906-07, 1,49,301 acres (60,420 hectares) in 1951-52, 2,05,121, acres (83,009.9 hectares) in 1961-62, and 89,179 hectares in 1972-73. In recent years a number of high-yielding varieties of sugar-cane have been introduced in the district, the total production in 1969-70 amounting to 47,75,010 tonnes.

Of the oil-seeds, ground-nut occupies the largest area in the district, occupying 10,966 hectares in 1969-70, giving second place to the district in the whole of the Agra and Meerut Divisions. (Etah district in the Agra Division with 18,523 hectares being the first). In 1972-73 ground-nut was sown in an area of 10,486 hectares. Mustard covered 36 hectares, til 356 hectares, and linseed 85 hectares in that year.

Sunn-hemp is sown both for its fibre as well as for its use as a green manure crop. It occupied an area of 421 hectares. Tobacco was sown in 422 hectares in the district in 1972-73.

Vegetables occupy a small area, being cultivated mostly in the vicinity of large villages or towns. Potato, however, covers a sizeable area, which, in 1972-73 was 562 hectares.

The statement below gives the figures of average yield per hectare in quintals of the important non-food crops in the district in 1969-70 with the corresponding State average figures during the same year :

Crop	Average yield in district	Average yield in State
Sugar-cane	517.07	440.80
Potato	82.20	82.20
Ground-nut	5.17	7.69
Mustard	4.40	5.12
Til	1.70	1.70
Linseed	2.55	2.55
Tobacco	9.83	10.39
Sunn hemp	4.92	4.92
Cotton	1.81	1.73

Improvement of Agriculture

The ever-increasing demand for food-grains necessitated far-reaching improvements and changes in the pattern and technique of agriculture. After the achievement of independence, the development of agriculture has been given an important place in the country's Five-year Plans. Improved and scientific methods of growing wheat, barley and rice have been popularised among the cultivators. These methods include proper tillage, sufficient and timely manuring, sowing of seeds of improved varieties and high-yielding crops, proper and timely irrigation and protection of crops against pests and diseases. The sixties of this century saw the ushering in of the 'green revolution' in the country, under which, schemes of intensive cultivation and sowing of high-yielding seeds of wheat, barley, maize, jowar, *bajra*, sugar-cane and other crops have been implemented. The government agriculture farms in the district and various other agencies of the Central and State governments, the Food and Agriculture Organisation of the United Nations, agricultural colleges and universities and research centres in the country are doing a pioneering job in orienting the farmers for adopting better and scientific methods and implements of cultivation for higher production and explaining the improvements through demonstrations and exhibitions in the fields. Through the development blocks, the latest techniques and cultivation practices, improved implements, high-yielding varieties of seeds, chemical fertilizers and plant protection services are made available to the agriculturists in the district. Farmers are trained in improved agricultural techniques and Rabi, Kharif and Zaid campaigns are organised every year through which experts of the agriculture department and develop-

ment blocks help the cultivators to solve their problems and also explain and demonstrate latest scientific methods in their fields to enable them to increase the agricultural output.

Seed Supply

The most common high-yielding varieties of seeds in the district are Exotic paddy and millets, Hybrid maize, Mexican wheat, U. P. wheat, U. P. maize and Hybrid *bajra*. The total area sown with these improved seeds in the district was 83,728 acres (33,884 hectares) in 1967-68, rising to 2,07,907 acres (88,137 hectares) in 1968-69, 2,50,089 acres (1,01,200 hectares) in 1969-70 and 2,70,250 acres (1,09,366 hectares) in 1970-71. The cereal-wise area sown in the district in 1971-72 was as follows :

Name of cereal	Area in hectares
Mexican wheat	65,600
U. P. wheat	21,570
Hybrid maize	300
Hybrid <i>bajra</i>	325
Paddy	46,240
U. P. maize	6,500

During the Fourth Five-year Plan period it has been planned to sow seeds of high-yielding varieties of the value of Rs 6.42 lakhs, the yearwise break-up being as under :

Year	Amount (in lakhs of Rs)
1969-70	0.73
1970-71	0.99
1971-72	1.34
1972-73	1.55
1973-74	1.81

Of this amount nearly half is to be met by the government, the co-operative institutions, the farmers themselves and other agencies. While the remaining half is to be met by the commercial banks under their agricultural development programmes,

Seeds of cereals are supplied by the government through the seed stores maintained by the agriculture department and co-operative seed stores under the supervision of the co-operative department. The former advance seeds on cash payment or as *taqavi* and the latter on *sawai* basis, that is repayable at 25 per cent in excess of the quantity advanced. There were 85 such seed stores in the district in 1971-72, of which 57 were under the agriculture department and the rest were managed as co-operative institutions. The seed stores, however, meet a small fraction of the total demand of seeds of the farmers, the bulk being supplied by the local dealers who obtain them from the National Seeds Corporation, Tarai Seed Development Corporation and other agencies. The total quantity of improved seeds of various cereals distributed by these seed stores was 17,530 quintals in 1971-72.

The agriculture department has established an agriculture farm at Dhanauri on the Roorkee-Hardwar road, nearly 11 km. from Roorkee in 1950-51. The farm covers a total area of 90 acres (36.4 hectares) out of which cultivation is done on 83 acres (33.5 hectares). There are two tube-wells for irrigation in the farm and for agricultural operations it had one tractor and 12 other machines like threshers, seed cleaners, levellers and harrows in 1972. Total production of cereals at the farm in that year amounted to 1,457 quintals, the average yield per hectare working out at nearly 38 quintals. The cereal seeds of fine quality produced at the farm are also sold to the farmers for meeting their seed demand.

Soil Nutrients

The traditional manures are cattle dung, farm refuse and stable litter. The usefulness of green manure crops such as *lobia*, *guar*, *dhaincha*, *sanai* and *moong* which provide nitrogenous ingredients to the soil and increase its fertility is being increasingly realised by the cultivators. The increased popularity of this method is easily gauged by the fact that in the year 1971-72 an average area between 25,000 to 30,000 hectares was sown with these crops in the district.

The use of chemical fertilisers, though costly because of their insufficient production in the country, has also become very popular with the cultivators in this district. Among these the most popular are the nitrogenous, phosphatic and potassic fertilizers.

The seed stores of co-operative and agriculture departments are able to meet only a fraction of the total requirement of green manure crop seeds and chemical fertilizers, in the district. The cultivators have usually to make their own arrangements, purchasing them from private dealers at exorbitant rates to be able to use them at just the time when they are required. The government seed stores and the co-operative institutions and retail agencies of the U.P. Agro-Industrial Corporation in the district

distributed 10,237 tonnes of chemical fertilizers during 1968-69 and 15,655 tonnes in 1969-70 the quantity distributed in 1970-71 going up to 17,800 tonnes.

During the whole of the Fourth Five-year Plan period, it is planned to make available to the cultivators in the district chemical fertilizers worth Rs 30.06 crores, nearly 70 per cent of the financial burden in this respect to be met by the government and the co-operative institutions and the remaining 30 per cent is to be met by the farmers themselves with the help of financial advances by the commercial banks in the district.

Agricultural Implements and Machines

The pace of replacement of old and traditional agricultural implements such as spade, sickles, wooden ploughs, etc., by improved and modern implements of agriculture has been faster in this district as compared to other districts of the State. The reason apparently is the comparatively more advanced agriculture and the resultant economic well-being of the farmers. According to the Live-stock Census Report of 1966, there were in the district 1,43,377 ploughs, 9,262 other improved agricultural implements like harrows, cultivators, sowing machines and threshers, 76,517 chaff-cutters (chopping machines), 109 machines for spraying insecticides and pesticides, 68,182 bullock-carts, 1,520 sugar-cane crushers, 585 tractors, 511 *ghanis* or oil-seed crushers, 2,166 oil-engines and electric pumping sets for irrigation and 7,597 Persian wheels (*rahats*) fitted on the wells for watering the fields. By 1970 nearly 40 per cent of the farmers of the district with viable holdings had their own tractors and allied improved implements for cultivation. There were 24 private concerns for manufacturing agricultural implements and tools in the district who produced implements worth Rs 32 lakhs in 1969-70.

During the whole of the Fourth Five-year Plan period, it is estimated that implements worth Rs 478.15 lakhs are to be required for the district, the yearwise break up being as follows :

Years	Amount (in lakhs of Rs)
1969-70	73.33
1970-71	84.32
1971-72	95.67
1972-73	101.59
1973-74	123.24

The State agriculture department gives *taqavi* loans to the cultivators for purposes like the purchase of chemical fertilizers, agricultural implements, improved varieties of seeds, pesticides, and bullocks. The co-operative institutions in the district also advance credit to cultivators for these purposes. There has been provided considerable assistance to the farmers of the district in the form of *taqavi* loans for the purchase of improved agricultural inputs in the last few years; the total amount of *taqavi* loan distributed in the district in the five-year period (1965-66 to 1969-70) being 192.54 lakhs. The co-operative institutions of the district also disbursed long-term, medium-term and short-term loans for agricultural purposes to the farmers to the tune of Rs 5,54,89,071 in the entire Third Five-year Plan period. In 1970-71 alone they provided a sum of Rs 2,85,01,881 in the shape of such loans to the cultivators of the district.

Rotation of Crops and Fallowing

Formerly the practice of leaving the fields fallow for at least one season was common among the cultivators as it was considered necessary to allow the land time to recuperate so as to enhance its fertility. But of late this practice is gradually giving place to the old tried method of sowing crops in rotation and the mixed cropping system which makes for intensive cultivation and increases the total yield.

The agricultural experts of the government and other agencies like the numerous agricultural universities and research centres in the country are actively busy in propagating the most modern methods in these matters for the last nearly a decade with a view to usher in the 'green revolution' and make the country self-sufficient in food-grains.

The most common rotations of crops prevalent amongst the cultivators in the district at present are :

One Year Rotational Pattern

Type of soil	Irrigated/ Unirrigated	Kharif	Rabi
1. Sandy	Unirrigated	Ground-nut + <i>bajra</i> or <i>urd</i> + <i>arhar</i>	Barley or melons or <i>arhar</i>
	Irrigated	Ground-nut, <i>bajra</i> (hybrid), <i>moong</i>	Wheat or barley or potato
2. Sandy Loam	Unirrigated	<i>Bajra</i> , <i>lobia</i> + <i>arhar</i> or	<i>Arhar</i> or
		maize or <i>bajra</i>	Barley + gram

[Continued]

Type of soil	Irrigated/ Unirrigated	Kharif	Rabi
3. Loam	Irrigated	Jowar + <i>moong</i> + <i>arhar</i>	or <i>Arhar</i>
		Jowar + <i>urd</i> + <i>arhar</i> cr	<i>Arhar</i>
		Green manure, paddy	or Wheat
		Paddy	Wheat
		Maize or <i>bajra</i> (hybrid)	or Wheat
	Unirrigated	Fallow	Tobacco
		Maize	Mustard
		Maize or <i>bajra</i>	<i>Barseem</i> or potato
		<i>Moong</i> , maize	<i>Toria</i> + Wheat
		Paddy	Wheat
4. Clay	Unirrigated	Paddy	Gram
	Irrigated	Paddy	Wheat

Two Year Rotational Pattern

Type of soil	Irrigated/ Unirrigated	First Year		Second Year	
		Kharif	Rabi	Kharif	Rabi
1. Sandy Loam	Unirrigated	Ground-nut	Wheat	<i>Bajra</i>	Wheat
	Irrigated	Paddy	Wheat	<i>Moong</i> , paddy	Wheat
		Early maize	Late wheat	paddy	Gram (hybrid)
2. Loam	Unirrigated	<i>Bajra</i> + <i>arhar</i>	<i>Arhar</i>	Maize	Wheat or barley + Gram
	Irrigated	Maize	Potato or wheat	Paddy	Mustard + wheat
		Paddy	Wheat	<i>Moong</i> , paddy	Wheat
				Fodder	
3. Clay	Unirrigated	Paddy	Gram	Fodder	Wheat
	Irrigated	Paddy	Wheat	Paddy	Onion

Three Year Rotational Cropping Pattern

Type of soil	Irrigated/ Unirrigated	First Year		Second Year		Third Year	
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
1. Sandy Loam	Unirrigated	<i>Bajra</i>	Fallow	<i>Bajra</i> + <i>arhar</i>	<i>Arhar</i>	Ground-nut + <i>arhar</i>	<i>Arhar</i>
	Irrigated	Fodder	Sugar-cane	Sugar-cane	Sugar-cane	Sugar-cane	Fallow
		Fodder	Wheat	<i>Lobia</i>	Sugar-cane	Sugar-cane	Sugar-cane

[Continued]

Type of soil	Irrigated/ Unirrigated	First Year		Second Year		Third year	
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
2. Loam	Unirrigated	<i>Bajra</i> + <i>urd</i>	Pea	<i>Bajra</i> + <i>urd</i>	Barley	Fallow	Wheat
	Irrigated	Paddy or Maize	Sugar- cane Potato	Sugar- cane Ground- nut or Green manure	Sugar- cane Wheat	Suga - cane Maize	Sugar- cane Wheat + Mustard
3. Clay	Irrigated	Paddy	Wheat	Maize	Wheat	Paddy	<i>Barseem</i>

Mixed Cultivation

The practice of simultaneously growing more than one crop in a single field more or less in a single season gives additional harvest and thus increases the overall yield. The surface area and the soil nutrients of the field are utilised to the maximum. It also serves as a security against adverse weather conditions and pests and insects as there are always chances to save at least one crop in the field because pests and diseases and adverse weather conditions do not usually affect all the crops in the field with equal severity. The sowing of leguminous crops like *moong*, *urd*, *guar* with cereals provides nitrogenous ingredients to the soil in the most perfect natural state. Accordingly, almost always, *arhar* is sown mixed with jowar, *urd*, til or ground-nut; *bajra* with *urd*, *arhar* or ground-nut; wheat with gram, pea or mustard; barley with gram or pea; maize with *urd*; ground-nut with *guar*; and cotton with *urd*. Potato is generally sown mixed with *methi* (fenugreek) or onion; sugar-cane with *moong*; and rainy season vegetables and late paddy with coriander (*dhaniya*) or *methi*.

Agricultural Co-operatives and Joint Farming

The practice of cultivating the land jointly (*sajha*) is very old among the farmers. Forests and pasture lands are still used in common. Cultivators often pool their implements, bullocks and labour for a season or two for growing crops. Costly implements and machines are also sometimes owned or hired jointly and used in rotation.

In recent times co-operative societies have been formed in the villages for farming, distribution of seeds, loans, fertilisers and implements, cattle breeding, supply of milk to big towns and marketing of agriculture produce of the cultivators.

In 1972 the district had 28 co-operative seed stores, whose main function is to arrange for credit and seeds of crops to the cultivators and 36

co-operative farming societies of which 13 were lying dormant and did not function; those which functioned, having produced agricultural commodities worth Rs 11,29,000.

There were also six co-operative marketing societies some details about which are given in the statement below :

Name and location	Year of establishment	Agricultural produce marketed (Rs, in 1971-72)
Co-operative marketing society, Manglaur	1956-57	6,33,192
Co-operative marketing society, Rampur	1957-58	1,86,879
Co-operative marketing society, Gangoh	1957-58	12,10,400
Co-operative marketing society, Saharanpur	1958-59	4,92,565
Co-operative marketing society, De nand	1963-64	17,02,985
Co-operative marketing society, Jwalapur	1963-64	48,417

Horticulture

The district has a well-deserved reputation in the State for its fruit orchards and nurseries.

Generally speaking the district is well-wooded, except in the rice tracts and the open wastes of the river valleys. In the upland parganas almost every village possesses one or more groves of mango and other trees. At the time of the Settlement of 1870, the grove area in the district was 6,286 acres (2,541 hectares). Subsequent years have witnessed a further increase, and for the five years ending in 1906-07, the average was 13,133 acres (5,314 hectares). In 1972-73, the area under groves and orchards was 3,694 hectares.

Except in the government gardens and orchards of private horticulturists and nursery owners, in which nearly every variety of Indian and European fruit is grown with a success that has won for the district its reputation the groves seldom contain any species beyond the mango, which thrives exceedingly well here. The scattered trees to be seen all over the district are of the kinds common to all the Gangetic plain; the most usual are the *shisham*, *stras*, *jamun*, *babul* and the various kinds of fig, such as the *gular*, *pipal*, *bargad* and *pakar*.

The government gardens and horticulture research station, Saharanpur, is situated about $1\frac{1}{2}$ km. north of the railway station, between the Chakrata road and the jail, in close proximity to the city and the civil lines. The place is admirably laid out, with fine avenues of timber and ornamental trees, tanks of water, shrubberies and flower beds, and though no longer treated as a pleasure garden to the same extent as was the case in former days, it is still a most attractive and picturesque spot. The chief value of the garden lies in the production and acclimatisation of fruit trees, vegetables and flowers its geographical situation being peculiarly well-suited for this purpose. From both botanical and commercial aspects the Saharanpur garden holds the premier position among similar institutions in India, its business relations extending not only to all parts of the peninsula and Burma, but also to Egypt and African countries.

The area of the garden is about (125 acres) 50.5 hectares, exclusive of (38 acres) 15.5 hectares known as the farm, which is used for the production of vegetable seeds. There are extensive fruit and plant nurseries, glass and chick houses for propagation, and a large chick house known as the conservatory for ornamental plants requiring protection from the hot sun and frost.

It appears that a garden known as the Farhat-baksh was laid out by Intizam-ud-daula, who held this district in jagir some time prior to 1750, and that it became a favourite resort of the Rohilla chieftains. It was later renovated by Ghulam Qadir, who endowed it with the revenues of seven villages, five of which were resumed by the Marathas, so that at the time of British occupation of these areas (cession) the proceeds of only two villages, amounting to some Rs 1,500 were available for its support. In 1817, an additional grant of Rs 900 per annum was made and the superintendence was assumed by the government. The yearly grant was afterwards increased to Rs 10,780 and in 1826 a branch of the garden was also started at Mussoorie.

In the beginning, one of the primary objects of the garden was the culture of medicinal plants for the supply of drugs to the medical departments. The first of these to be taken up was henbane. It was owing to the desire of extending the production of drugs that the Mussoorie branch was established which flourished till 1908, when it was abolished in favour of the one near Naini Tal.

Another branch of the operations which dates from the beginning was the collection of seeds of flora from all parts of northern India for sending them to botanic gardens in foreign countries, especially England on an exchange basis. This activity was in 1908 taken up by the forest research institute, Dehra Dun. The supply of seeds and seedlings of foreign plants by the Saharanpur garden, for the canal banks in the whole of north India dates from 1827 and in nearly all the gardens of military stations

from 1840. The production of trees for roadside plantations has also been one of its activities. Trees were sent free of cost to almost every public garden in the N. W. P. and the Punjab, as well as to civil officers, who also received large quantities of agricultural and horticultural seeds for distribution to the public. The free issue of plants and seeds ceased in 1869, when the gardens first began to assume a commercial character. In 1906-07 the quantities sold were 17,136 fruit trees, 55,179 other trees, plants and shrubs, as well as 9,566 lbs. (4,339 kg.) of seeds. As early as 1866 there were about 700 fruit gardens within a radius of 8 km. (5 miles) from the city and nearly all were stocked from this garden. Saharanpur is entirely indebted to the government garden for its reputation as a foremost fruit-growing district in the State. The institution, too, has from the very beginning been most valuable as a training school for gardeners.

Among the fruit trees many varieties of mangoes, plums, oranges, peaches, loquats, limes, apples and pears have been developed here. Of the most successful are the La Comte pear, the only variety that ripens in the plains, and the Japanese persimmon, a fruit combining a delicious flavour with excellent keeping qualities. The principal timber trees introduced from other countries are the mahogany and the eucalyptus. The former was brought here from the West Indies in 1828; but though some very fine specimens have been raised, the tree does not yield seed here, and the stock has to be replenished from abroad. A great deal of attention has been paid to the development of fibres, both exotic and indigenous, and the most successful experiments have been those connected with reha and agave.

Among other products mention may be made of the sweet chestnut, now so common in the Dun and elsewhere, the cultivation of mulberry trees for sericulture and experiments of coffee, tobacco and tapioca. But the grandest work of acclimatisation as yet achieved by the garden is that of the tea plant. Its introduction into the hills of northern India was first suggested in 1828 by Dr Royle, the superintendent of the gardens. The history of the tea gardens in the northern India does not belong to this district, but no account of this institution would be complete without a reference to the great work relating to tea culture on which Dr Jameson, superintendent of the gardens from 1842 to 1876, was engaged for a considerable length of time.

There are also various other nurseries in the district which supply fruit plants and seeds and seedlings of vegetables to the orchardists and cultivators in and outside the district. Nearly 20 of these were important and doing good business in 1970.

The statement below gives some relevant details of the horticultural development work done in the district in 1970-71 :

Horticultural activity	Progress achieved in 1970-71
Plantation of new orchards (hectares)	268.7
Rejuvenation of old orchards (hectares)	227.0
Distribution of fruit plants and seedlings (No.)	52,958
Grape cultivation (hectares)	2.5
Distribution of grape plants (No.)	780
Area under fruit cultivation (hectares)	4,440.0
Distribution of vegetable seeds (kg.)	7,737.4
Distribution of vegetable seedlings (No.)	13,93,005
Area under vegetable cultivation (hectares)	2,272.7

Agricultural Diseases and Pests

There are three main enemies of crops in the district, viz. animals, birds and insects. A number of plant diseases, fungi and weeds also cause a good deal of damage to plants of food-grains, vegetables and fruits. Monkeys, rats, squirrels, wild animals, bats, parrots and some other birds damage the crops badly. The usual methods of protection normally provided by the cultivators are fencing, keeping watch and destruction of the animals and birds. Leaf-mosaic, rust, smut and termite attack the wheat, barley and pea crops. The paddy crop is generally damaged by leaf-mosaic, blight and the *gundhi* pest. Potatoes and other vegetables are mostly affected by blight, leaf-mosaic and pink boll-worm. The canker and wither-tip take heavy tolls of citrus fruits. Mango and guava orchards are the worst sufferers from die-back, black-tip of mango, damping of seedlings and wither-tip. There are various insecticides and pesticides like Aldrin, BHC and DDT which are sprayed or dusted over the crops to control plant pests and diseases. To save the crops from seed-borne diseases the seeds are dried in the sun and also treated with certain chemicals before sowing. There are also numerous other leafy growths and weeds which are harmful to the crops. These are usually overcome by systematic and timely weeding, interculturing and the deep ploughing of the fields. The plant protection staff in the district gives free advice to the cultivators on matters about raising healthy crops of fruits, vegetables and cereals, and taking up timely measures for protection of plants from diseases, pests, etc. They also provide insecticides, spraying and dusting machines and the services of trained staff at moderate charges. Total quantity of pesticides in powder form distributed in the district in 1965-66 was 346 tonnes and by 1969-70 it rose to 1,080 tonnes; the figure for liquid pesticides having gone up to 41,990 litres from 13,930 litres in 1965-66. Total area of crops treated

against seed-borne disease and that which was saved from rodents and other plant diseases were 72,175 hectares, 25,588 hectares and 76,040 hectares respectively in 1969-70.

The statement below gives the total area of various cereal, vegetable and fruit crops in the district which were sprayed or dusted with insecticides and pesticides in 1971-72 and 1972-73 :

Crops	Area covered (in hectares)	
	1971-72	1972-73
Wheat	25,110	30,120
Paddy	21,310	27,110
Mustard	300	800
Sugar-cane	6,310	10,930
Potato	1,120	1,240
Mango	1,210	1,530

ANIMAL HUSBANDRY AND FISHERIES

Generally speaking, the domestic animals found in the district are of fair quality and better than in more southerly districts of the doab. The live-stock population of the district, according to live-stock censuses of 1961 and 1966, was as follows :

Live-stock	1961	1966
Cows	2,00,533	1,31,147
Bulls and bullocks	3,19,953	3,84,635
Female buffaloes	1,80,045	1,39,938
Male buffaloes	41,314	1,29,923
Goats	17,704	29,047
Sheep	24,232	32,405
Horses and ponies	8,678	8,912
Donkeys	2,440	1,691
Camels	1,013	1,242
Mules	428	3,955
Pigs	20,604	17,811

Sheep and goats are generally reared by the Gadariyas. They are kept for their flesh and skins. Goat milk is also in general demand and wool obtained from the sheep is used for making coarse blankets locally. They are also penned on the land, a considerable sum being realised from the cultivators in return for the manure they afford.

Development of Live-stock

The old reputation of Saharanpur as a horse-breeding district has vanished. The country-breeds of Katha were once famous, and it was partly on this account that a stud centre was established in Saharanpur in 1842. Stallions were also located in several of the Katha villages and other parts of the district. The experiment proved too costly and unprofitable and was eventually abandoned in 1880. The stud establishment was taken over by the army for training and preparing for service in the cavalry and horse artillery the imported Australian animals. The decay of the horse-breeding trade has also affected the Hardwar horse fair, which in olden days was one of the chief institutions of the kind in northern India. It took place at the time of Dikhanti bathing fair, about the middle of April every year, and was largely attended by dealers from all parts of the country, caravans coming even from Afghanistan and other distant regions. At present a stallion has been kept at Gangoh for the purpose of raising the breed of horses.

Attempts were also made to encourage mule-breeding, and a number of donkey stallions, either Italian or Cyprian, were brought in the district for the purpose, but this experiment too proved a failure.

The government has paid much attention to improving the breed of cattle after the achievement of freedom and has taken up many schemes under the respective Five-year Plans. Artificial insemination for raising the breed of cows and buffaloes was started in the district in the First Plan period and there were 17 such centres in 1972.

Government supply at concessional rates bulls of Murrah, Haryana, Sindhi and Sahiwal breeds, especially in areas which are not covered by artificial insemination centres. A total of 314 stud bulls were thus distributed in the district in the first three Plan periods and 77 stud bulls were further supplied in the period from 1966-67 to 1971-72.

For improving the breed of sheep and goats, stud rams and bucks of Barbari and Jamunapari breed have been supplied. Rams numbering 36 and bucks numbering 68 were distributed by the government in the first three Plan periods and 9 rams and 73 bucks were distributed in the period from 1966-67 to 1971-72.

Steps have also been taken to encourage pig-breeding in the district and for that purpose 160 Yorkshire breed of boars were supplied in the period covering the first three Five-year Plans and 80 such boars were supplied in the period from 1966-67 to 1971-72.

Loans are also provided to the cultivators for the purchase of cows and buffaloes of improved breed. During the first three Plan periods a total sum

of Rs 74,000 and in the period from 1966-67 to 1971-72 a sum of Rs 43,000 was distributed for this purpose in the district through the animal husbandry department.

Poultry Development

According to the live-stock census of 1966, there were 1,01,575 poultry birds in the district, of which 96,854 were hens and cocks, 816 ducks and drakes and 3,905 other birds. To encourage poultry-farming as a subsidiary industry for the benefit of the cultivators, the government distributed at subsidized rates, 21,859 birds of improved breed in 1971-72.

There were two government poultry farms at Rampur-Maniharan and Bahadabad each having about 200 birds in 1972. Besides these there are numerous private poultry farms, particularly in and around Saharanpur and Roorkee towns, some of which have upto 500 birds. They obtain improved fowls from the government poultry farms in the district and also from Delhi and other places.

Cattle Diseases and Treatment

The diseases generally afflicting the cattle in the district are rinderpest (Pokna), malignant sore throat (Galghontu), black-quarter (Padsuja), anthrax (Tilsuja), dysentery (Pechish) and foot-and-mouth disease (Khurba). Old superstitions, practices and taboos are still rife among the village people. As a result, they do not always take recourse to modern medicines and methods of treatment for the prevention and cure of animal diseases. However, with the opening of a number of veterinary hospitals and stockman centres in the district, and as a result of practical demonstrations and publicity carried out by the animal husbandry department, the villagers are becoming more and more aware of the efficacy of scientific and modern methods of treatment of cattle diseases.

There is a live-stock officer who is in charge of the animal husbandry programme in the district. With him an artificial insemination officer also works, who particularly looks after the schemes related to improving the breed of live-stock through artificial insemination. The veterinary hospitals, which numbered 23 in 1972 and most of which had artificial insemination service centres attached to them, and the stockman centres numbering 27, provided treatment, breeding facilities and other advice regarding the health of cattle to the cultivators. The statement below gives the number of animals treated, vaccinated and castrated and also the number of cows and buffaloes which were provided with artificial insemination service in the district in the first three Plan periods and in the period from 1966-67 to 1971-72 :

No. of animals	First Plan period	Second Plan period	Third Plan period	In the period from 1966-67 to 1971-72
Treated	91,597	1,40,340	2,71,246	6,06,285
Vaccinated	2,63,974	3,41,680	6,35,970	11,95,187
Castrated	11,527	21,648	44,898	74,758
Artificially inseminated	1,800	2,951	20,096	1,15,647

Housing and Feeding

Domestic animals are generally housed in thatched kutcha cattle-sheds, pakka and well-ventilated byres with roof of iron or asbestos sheets are to be seen only in the government farms and in big cultivators' farms. Although government provides monetary help for constructing community cattle-sheds in the villages, the progress achieved in this field so far is very negligible.

Grazing facilities for the cattle are provided by the government and the village panchayats in forests and waste lands under their respective control. Grazing is also allowed in private groves and harvested or fallow fields. On the canal banks and within the precincts of the railways, cattle are allowed to graze under stipulated conditions. In 1972-73 the total area covered by culturable waste land, pastures and grazing grounds, forests and fallow land was 1,04,709 hectares. Barren and unculturable land measured 7,550 hectares in the same year.

The crops which provide fodder to the cattle are maize, jowar, *bajra*, *barseem* and *lobia*. The husk and dried and crushed stalks of wheat, barley, *arhar*, *urd*, *moong*, pea, gram and paddy are also used by the cultivators to feed the cattle. The seed stores of the agriculture and co-operative departments provide seeds of nutritious fodder crops to the cultivators. The area covered by the fodder crops in the district in 1971-72 was 1,35,341 hectares.

Fisheries

The rivers, canals and lakes of the district contain a plentiful supply of fish. The Ganga, Yamuna, Hindan and Kali are chiefly noted for them. The usual modes of catching fish are by means of the drag net, the *tapa* or funnel-shaped basket and the fishing-rod. The Meos, both Hindu and Muslim, many of whom cross over into this district from Bijnor, Mallahs, Kahars, Julahas, though they ordinarily pursue other occupations,

occasionally catch fish for sale. The fish mostly found here are locally called *rohu*, *nain*, *bhakur*, *karauch*, *mahaseer*, *chilwa*, *goonch*, *saul*, *mola*, *anwari* (*mullet*), and those of the carp tribe. There were 324 fishing nets and tackles in the district according to the live-stock census of 1966.

Schemes for the development of pisciculture in the district have been taken up from the year 1960-61.

Fingerlings were supplied to the pisciculturists at subsidized rate of Rs 40 per thousand and loan amounting from Rs 200 to 500 per head was given to individuals to effect improvements in the fish nurseries in the district. Government also gave a grant of Rs 10,000 to each of the two fishermen's co-operative societies established at Saharanpur and Baliakheri in 1960-61, to undertake piscicultural activities and to raise the economic condition of the local fishermen. The societies, however, did not last long and government had to recover the money granted to them.

From 1963-64, fingerlings are being supplied to private breeders at the rate of Rs 10 per thousand under the scheme known as applied nutrition programme.

The total amount of loan provided by the government for making improvements in the tanks for piscicultural activities from 1960-61 to 1964-65 was Rs 4,200.

Four development blocks have been selected in the district, Rampur-Maniharan and Bahadabad in 1963-64, and Roorkee and Muzaffarabad in 1966-67 for undertaking fish development schemes under the applied nutrition programme. Under the scheme fingerlings are supplied to *gaon sabhas* and co-operative societies with the condition that 20 per cent of the produce be distributed free to children and pregnant women. Up to 1968-69 more than 1,55,000 fingerlings were supplied on this basis to the *gaon sabhas* in these four blocks. The following statement gives the number of government fish nurseries, and the total number of fingerlings supplied by them to private breeders in the district from 1960-61 to 1971-72 :

Year	No. of fish nurseries	No. of fingerlings supplied
1960-61	3	53,000
1961-62	2	1,22,700
1962-63	5	1,44,000
1963-64	7	1,67,000
1964-65	5	1,85,000
1965-66	5	1,09,000
1966-67	1	35,000

[Continued]

Year	No. of fish nurseries	No. of fingerlings supplied
1967-68	7	21,700
1968-69	4	17,100
1969-70	4	29,326
1970-71	4	46,645
1971-72	4	32,500

FORESTRY

Forests cover practically the whole of the hilly range of the Siwalks as far south as the submontane region which includes the Roorkee tahsil. Bishanpur islands in the Ganga below Hardwar, the Pathri region on the plateau between the Ganga and the canal and the Sakrauda area cut by numerous torrent beds. Apart from the government forests there are no large areas of jungle or waste, except in the parganas of north. This is generally covered with trees and coarse grass which is in itself of considerable economic value and also useful for grazing. In the open and agriculturally developed country of the uplands tree jungle is almost unknown, but in the *khadir* occasional patches of dhak and other species are to be seen, both in the north and in Gangoh, Manglaur and elsewhere.

The total area of land covered by all kinds of forests and jungles in the district was 74,692 hectares in 1971-72 and it was under the control of the forest department of the State. The civil forests or jungles under the jurisdiction of the *gaon sabhas* covered an area of 883 hectares in 1972-73.

The trees mostly found in the forests are the *sal*, *haldu*, *bel*, *sissoo*, *ber*, *chir*, *bakli*, *sain*, *bahera*, *gular*, *amla*, *dhauri*, *amaltas*, *khair*, *rohini*, *dhak*, *bargad* and bamboo.

In the areas adjoining the forests people find employment in a number of industries connected with forest products, like timber and wood cutting for furniture, fuel, building, toys, agricultural implements and match industry. Grass is used for making ropes, strings and thatching material. There is great demand of soft wood species like *kanju*, *baurang*, and *jhingan* for the plywood industry at Jwalapur. The *semal* and *allanthus* are used in match industry at Bareilly. *Khair* trees yield catechu which is exported to Dehra Dun, Delhi, Meerut, Bareilly and Kanpur. *Baib* grass is mostly used for making paper at the Star Paper Mills at Saharanpur. Other minor forest products are gum, honey and medicinal herbs and plants. The total produce of the forests in the district was worth Rs 29,49,009 in 1970-71.

NATURAL CALAMITIES

Prior to the construction of the eastern Yamuna and the Ganga canal systems in the last century, the district suffered repeatedly from famines, in common with the rest of the upper doab. Although numerous references to such calamities are to be found in the writings of the Muslim historians, yet in a few instances only there are any direct allusions to the area comprising the present district. One of the first, of which anything is known, occurred in 1291, during the reign of Jalal-ud-din Firoz Shah, when the prices rose to an abnormal level, and the scarcity in the Siwalik country was very severely felt. The Hindus of that country came into Delhi with their families, 20 or 30 of them together, and in the extremity of hunger drowned themselves into the Yamuna. The Sultan who was a generous and tolerant king, and his nobles did all they could to help them. In the following year there was abundant rain. The reign of his nephew and successor, Ala-ud-din Khalji, was signalised by the introduction of 'grain laws' of the most arbitrary kind. The worst sufferers from these laws were the cultivators of the country situated in the neighbourhood of Delhi. There is mention in the *Tarikh-i-Firoz-Shahi* that the public officers in the doab and the tracts situated close to Delhi were strictly ordered not to allow any one to hoard even a maund of grain or to sell it secretly above the fixed price. Cultivators were so burdened with exactions that it was impossible for them to carry any quantity of grain from the fields to their homes; they were compelled to sell the whole of it on the fields, and that too at a very low rate.

Another famine occurred not long afterwards in the reign of Muhammad bin Tughluq around the year 1344 A. D. Its impact was all the more gruesome because of the revenue policy of the ruler. His excessive exactions, says Zia-ud-din Barni, compelled the peasantry of the doab to abandon their homes and burn their crops. The people were reduced to such a state of poverty that they are said to have feasted on human carcasses. The country around Delhi and nearly the major part of doab was reduced to a desert. Another famine followed the incursion of Timur in 1399 A. D., but that was the result of his ravages rather than of unfavourable climatic conditions. Disease and epidemic ravaged the country and the fields were untilled, and there was no grain. Other visitations of like nature occurred in 1424 A. D. and 1471 A. D. but most of them were largely due to the ravages caused by the belligerents in the doab. Famines of which some historical records are extant occurred in 1631 A. D., in Shahjahan's time and in 1661 in the reign of Aurangzeb. They occurred due to excessive drought, were of a widespread and long-continued influence and devastated the upper doab. Much distress was experienced in 1739 as a result of the invasion of Nadir Shah and in subsequent years the Afghan raids and those of the Sikhs in these areas caused such scarcity of food-grains as was hardly less severe than those caused by failure of rains.

During nearly half a century which preceded the establishment of the British rule in the country, this part of doab, owing to the struggle among the Marathas, Jats and the British who were contending for the mastery of the empire, suffered from a state of constant and prolonged warfare. Troops constantly passing through the country destroyed the standing crops, so that agriculture was almost entirely neglected and the common necessities of life were unprocureable even at abnormal prices.

The great *chalisa* famine of 1783 appears to have left this district almost untouched. At any rate there is no information to show that its effects extended further north than Meerut, although it seems certain that the district could not have escaped the pressure of widespread scarcity by reason of the unprecedented height to which prices then rose.

The first famine which occurred after the establishment of British rule over these areas was that of 1803-04 which raged with great severity throughout the doab, and at the same time caused an extensive rise in prices from Rohilkhand to Varanasi. The Rabi crops had been extensively injured by hail-storms in the early part of 1803, while the rains subsequently were scanty in the beginning and ceased prematurely about the middle of August. Rabi sowing was also thus adversely affected and the outturn was further reduced by the failure of the winter rains. A large amount of revenue was suspended, the greater proportion being ultimately lost. In 1805 the outturn was up to the average, but in the following year the rains, though at first favourable, broke off in August, resulting in an extremely poor Kharif harvest. Similar disasters from like causes took place in 1810 and 1812. In 1824-25, however, there was a very serious drought occasioning famine in the Meerut, Rohilkhand and Agra Divisions. Large revenue balances accrued, and a considerable portion of the demand had to be struck off.

The earliest famine of which authentic records are extant was that which occurred in 1837-38. During the hot weather of 1837 the first symptoms of the approaching scarcity were shown by the prolongation of the hot westerly winds, which continued to blow throughout July and August. There were few showers in September, but the land remained dry and untilled except in the lowlying *khadirs* of the two major rivers and in a small area served by the newly opened eastern Yamuna canal. The traders closed their shops, the peasantry took to plunder, the cattle starved and died, crime was rife throughout the district and the people showed a general tendency to migrate from their homes in the vain hope of finding a means of subsistence elsewhere. In the beginning of 1838 an attempt was made to cope with the distress by the establishment of relief works, but large numbers perished of actual starvation, while the mortality from sickness was equally heavy. A fair proportion of the Rabi harvest was, however, saved by good rains in February, so that Saharanpur escaped more lightly than the southern

doab districts. Revenue demand amounting to a sum of Rs 1,03,264 was remitted in 1837-38 and the following year. Besides large sums were expended by the government by providing gratuitous relief to the cultivators for purchasing cattle, seed, etc.

In 1858 and the following year the rainfall was somewhat deficient and the Kharif harvest on both occasions was a partial failure. Matters reached their climax in 1860, when the rains held off till the middle of July and the people were already feeling the pinch of hunger. The monsoon was extremely weak and ended early. Relief work was started on the road from Roorkee to Fatehpur and the Mohand pass. The number of workers rapidly increased and by the end of January 1861 there were 10,000 persons at work, in addition to 17,640 persons, including infirm, old and children, who were provided with gratuitous relief. The distress increased in intensity until July, and up to that time no fewer than 29,51,424 persons, counted by daily units, were employed on the road, at a total expenditure of Rs 2,50,686, while in poor-houses and elsewhere assistance was afforded to 2,31,066 persons at a cost of Rs 15,248. With the advent of the rains work was obtained in the fields, so that the numbers were at once reduced and, as a further encouragement, some Rs 20,000 were granted for the purchase of seeds, grains and cattle. The canals, both the Ganga and the Yamuna, were by this time nearly completed and an average Rabi harvest was obtained in 1861 in nearly two-fifths of the district, the famine was very acutely felt in the area beyond the reach of canal irrigation. The loss of life both men and cattle, was very severe, as was indeed the case throughout the upper doab and Rohilkhand. A large proportion of the revenue could not be collected and the realisation of Rs 1,39,842 was postponed indefinitely, much of this being subsequently remitted.

Another great drought occurred in 1868-69, and again the immediate cause was the failure of the Kharif. As plentiful rain had fallen in July 1868, a large area was sown, but during August there were only a few showers in the central parganas of Saharanpur, Roorkee and Nakur, and when in September regular hot weather conditions again set in, the crops were mostly destroyed specially in areas which were not served by the canals. This also involved a great reduction in the Rabi area, except in the irrigated tracts, the decrease amounting in all to about 25 per cent of the normal. The winter rains came in time, so that an average outturn was secured in the whole district, except in the higher and sandy tracts. The rains of 1869 were timely and abundant, and with their establishment all anxiety for agricultural prospects ceased. On the other hand prices remained very high for a considerable period, although the district on this occasion benefitted largely by the railways which had recently been opened. There were no visible signs of distress till the beginning of 1869, when poor-houses were started and relief works were taken up. The latter consisted of the roads in the

vicinity of Saharanpur town and new roads between Manglaur and Rampur, and from Saharanpur to the Timli pass and Chakrata. Employment was afforded on these works to 2,47,000 persons at a cost of Rs 23,925 and 14,500 persons were supported by gratuitous relief at an expenditure of Rs 2,795. The numbers fell off with the commencement of harvesting operation for the Rabi and the works were totally deserted with the arrival of the rains. Material assistance was given to the cultivators in the way of advances, Rs 60,343 being granted for the construction of wells and the purchase of seeds and plough-cattle.

The general famine of 1877-78 affected this district only to a small extent. The rains of 1877 were a partial failure and in many parts of the district no Kharif could be sown, or else the young crops were destroyed by drought. With a good downpour in October and a timely fall of the winter rains hopes were at one time entertained of an abundant Rabi; but subsequently it was much damaged by strong winds and frequent rains that fell when the crops were ripening, so that wheat and barley were somewhat below the average and other staples gave a very indifferent yield. Symptoms of distress began to appear in January 1878, and work was started on the road from Saharanpur to Chilkana, while poor-houses were opened at Saharanpur and Roorkee and free kitchens were instituted at all the government dispensaries. Work was also taken up on the road from Saharanpur to Dehra Dun and that from Fatehpur to Muzaffarabad, the distress being greatest in pargana Haraura. The extent of distress on this occasion may be gauged from the fact that up to the end of September 1878 the total number of persons relieved on these works was 66,723, at a cost Rs 5,760, while in the poor-houses 29,336 persons were supported at a total expenditure of Rs 2,564. The revenue was suspended to the amount of Rs 29,738.

The district suffered to some extent from a cycle of bad seasons which began in 1894. The monsoon of 1895 was weak and the rains in the ensuing cold weather were insufficient, so that the Kharif and Rabi outturn were poor. In 1896 there was entire failure of rains, but the winter rains were fair and a moderate Rabi was obtained, so that on this occasion the agricultural population had no cause for complaint and the distress was only felt by the labouring classes and those who earned fixed wages. Liberal advances amounting to Rs 14,187 were given to agriculturists, particularly for the construction of wells.

The rains of 1897 and the following year were good, and at least average crops were harvested; but in 1899 there was total failure of the rains, resulting in complete loss of the Kharif. The demand for canal irrigation in the cold weather of 1899-1900 was unprecedented, though the eastern Yamuna canal proved unequal to the task of giving a full supply.

CHAPTER V

INDUSTRIES

Old-time Industries

Among the old-time industries and manufactures which employed some 57,000 persons or nearly five per cent of the population in 1901 and still survive, the chief is cotton weaving, which affords employment in its various branches. This trade has been carried on throughout the district, both in the towns and villages, the weavers being Hindu Koris and Muslim Julahas. It has, however, suffered considerably, owing to the competition of factory-made cloth, in the last hundred years or so. The chief product now is the ordinary coarse cloth known as *garha*, which is commonly produced everywhere even now. The town of Deoband has been particularly noted for the manufacture of *chauthai*, a strong closely-woven fabric generally of undyed yarn but sometimes with a red warp stripe down one side, and red weft stripes at varying intervals while occasionally more complicated patterns are also introduced. Cotton printing is even now carried on at several places by Chippis, but the work is inferior to that done in the neighbouring district of Muzaffarnagar. Dyes which were in the past, obtained in abundance from forests, have now been replaced by chemical dyes.

Wool weaving is also carried on in several parts of the district by the Gadariyas. The town of Deoband has been celebrated for blankets, which found a market outside the district also. The industry has suffered on account of superior mill-made goods having become available.

A more celebrated industry was the woodwork of Saharanpur, which had acquired wide reputation in the past. In its oldest form the industry consisted (apart from frames and wheels for carts) chiefly in the decoration, by wood carving, of doors, doorways and the like, the principal wood employed being *shisham*. It is believed that some Kashmiri craftsmen started this work for catering to the requirements of princes, and the existing aristocracy in these parts in the medieval and Mughal periods. The ornamentation was confined mainly to geometrical patterns, and ordinarily the only carving consisted of light floral designs, such as lotus, rose, trees, fruits like grapes and pears or *chinar* leaves. Inlaying work was introduced in Saharanpur through the influence of an European resident. Floral designs of brass, copper, and German silver were worked out on plain *shisham*, and this decoration, though occasionally applied to picture frames and caskets, was best adopted to panels, the finest specimens of this work being found in the Saharanpur church. Modern requirements have led to a large demand for household furniture which is

In 1947-48, there was again a heavy flood in the Ganga and much damage was done in the riparian areas. The Yamuna also rose in spate in 1950-51 and caused considerable loss in tahsil Nakur. There were also big fire accidents in nine villages in the district. A sum of Rs 45,000 was distributed as *taqavi* and Rs 6,000 was given as gratuitous relief to the sufferers. Floods and waterlogging affected nearly 100 villages in 1967-68. The Yamuna waters entered a number of villages, the worst affected being Kunda, Manpur, Noburrai and Daulatpur. Hail-storm also caused vast damage in about 700 villages in Saharanpur and Nakur tahsils.

In 1968-69, there was slight rise in the level of Ganga but no large-scale damage to crops was caused. However, the hail-storms adversely affected nearly 100 villages in tahsil Saharanpur. Nearly Rs 32,50,440 worth of crops were destroyed necessitating a remission of Rs 56,290 in land revenue.

The Ganga was again in spate in 1969-70 and an area of 6,216 hectares was affected in Bhogpur, Rampur Rai, Gheti and Jaspur-Ranjitpur villages.

The major rivers of the district were again in spate in 1970-71, when crops in an area of 23,664 hectares were affected. Fire accidents further destroyed property worth Rs 2,50,000 in 111 villages.

There was a shortfall in monsoon rains in 1971-72 adversely affecting the Kharif in nearly 17,400 hectares but timely winter rains made up the loss and there was a normal Rabi harvest.

CHAPTER V

INDUSTRIES

Old-time Industries

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now produced in considerable quantities, and in many cases of great excellence. It is made in *shisham* and *tun* while smaller articles are manufactured from the soft white wood known as *dudhi*, which grows in abundance on the Siwalik hills. Wood-carving has, however, been almost supplanted by the introduction of the fret-saw, and the export trade in screens, three-panel tables, side tables, boxes, tea-pot stands, tobacco jars, coasters, candle stands, fruit and salad bowls, cigarette cases, book-racks, table lamps, easels, ash trays and cupboards, etc., which are also exported to foreign countries, has resulted in the deterioration in workmanship.

The existence of the Siwalik forests had afforded employment to a large number of workers in cane and similar other jungle products, an extensive basket and cane work industry is still carried on at Hardwar and elsewhere in the district.

Lacquered work was also found at Saharanpur and some of the towns, although the industry was of little importance and the outturn of inferior description leading to its gradual decay. Pottery making in the district possesses a previous heritage of beauty and art. Indians have been hailed throughout the world as master-potters. The development of the art of pottery was mainly confined to the making of jars, flower vases, bowls and idols and similar objects besides painted pottery, both glazed and unglazed in its exuberant pictorial and decorative schemes with hundreds of scintillating motifs.

The district was noted for its glazed ornamental ware decorated with heavy gilding, and also for the glazed tiles made there, but in both cases the industry has nearly died out particularly due to lack of encouragement. Occasionally the common pottery is treated with a vitreous glaze, similar to that of the adjoining districts.

Wooden combs industry was also a flourishing trade in the district in the past. The combs were manufactured from *haldu* wood, and were very hard and durable. With the advent of horn, rubber and plastic, this traditional industry also has received a severe set-back now.

The glass industry, especially in the town of Rampur-Maniharan is still of some importance, although the chief products are the ordinary glass bangles, glass mouth-pieces for tobacco pipes. Up to the beginning of the present century Rampur was notable as one of the few places in the State where glass was moulded, the articles produced being mainly heavy ink-pots in light and dark blue shades, and paper polishers called *ghonta*, in the shape of a flat pestle.

Handicrafts in metal were unimportant, the production being limited to the ordinary requirements of agricultural and household use.

The only other trade deserving mention is leather work, mainly utilised for the manufacture of shoes, often elaborately embroidered or otherwise ornamented.

Till the close of the last century the district had a large area under indigo cultivation, and there flourished a number of indigo factories in the district. Here as elsewhere, its decline has followed on the depreciation of the value of the natural dye, consequent on the competition of chemical blue dye imported from Europe.

The canal foundry and workshop was established in 1843 in connection with work on the Ganga canal. In the beginning it was run on a modest scale, consisting of a timber yard, a smithy and a carpentry shop. Till 1851, they manufactured articles needed for the canal work and mathematical and surveying instruments. In 1852 the workshop was made an independent and self-supporting institution and its connection with the foundry and canal works was severed. In 1886, the workshop was reorganized and subsequently it was brought under the rules and regulations of other manufacturing departments of government. One-sixth of the total produce of the workshop was supplied to private customers and the rest to the public works department of the government. A similar workshop belonging to the Bengal Sappers and Miners of the British army was established in Roorkee cantonment around the sixties of the last century, which mainly supplied articles needed for the military department and did some commercial business also.

The drawing survey and mathematical instruments industry at Roorkee goes back to nearly 130 years. Its origin is linked with the mathematical instruments works at Calcutta which was established by Sir George Everest, the then Surveyor General of India. The person who assisted him in this work was an Indian, Sayed Mohasin, an excellent instrument designer who used to divide the circle of theodolite by hand. The actual manufacturing of these instruments started at Roorkee with the setting up there of the Thomason College of Civil Engineering in 1847 and every type of drawing, surveying and mathematical instrument such as theodolite, levels, compasses, drafting machines and office equipments were manufactured.

With the beginning of the present century, certain factories under European management were established in the district. The North-West Cotton Press Factory, the oil crushing industry, rice husking, flour mills and sugar-cane crushing mills were the main industrial concerns at that time. It was in 1902 that a number of cotton ginning mills were started. In 1910 the Saharanpur distillery was opened. Up to the late thirties of the present century, the district had a sufficiently large area under cotton cultivation and there were in the district 7 large cotton ginning mills with 230 ginning machines and the invested capital in these amounted to nearly 4 lakh rupees. Two units were also engaged in making cotton bales. In

subsequent years the industry gradually dwindled, one of the main reasons being the declining trend in the cultivation of cotton in the district.

Heavy Industry

The only heavy industry so far established is a public sector undertaking. The Bharat Heavy Electricals Ltd, Hardwar was established in 1967. It manufactures both hydro and steam turbine generators with maximum capacities of 6,600 mw. and 200 mw. respectively, medium and heavy motors of A.C./D.C. (A. C. up to 9,000 kw. and D.C. upto 3,000 kw.). This unit has been showing steady progress since its inception. In 1971-72 the total capital investment amounted to Rs 705.15 lakhs with an overall output of goods worth Rs 1,312.25 lakhs, it gave job facilities to, as many as 6,000 persons.

Large-scale Industries

There are now in addition several large-scale industrial units in the district, engaged respectively in manufacturing cigarettes, paper, sugar, spirit, hydro turbine and generators, milk powder, cloth, pipes and bars, etc. In 1971-72 the total investment on these industrial units amounted to Rs 3,413.85 lakhs with a total output of goods worth Rs 6,855.37 lakhs. The industries provided employment to as many as 18,512 persons during the said year.

In 1927, the Indian Tobacco Company Ltd, was established in Saharanpur. The company manufactures cigarettes of several varieties. Besides the cured tobacco which it obtains from the district itself it imports a large quantity of virginia tobacco from the Karnataka and Andhra Pradesh States in the south and even from United States of America. In 1972, the company had a total investment of Rs 625 lakhs with an output of cigarettes worth Rs 3,197 lakhs and employed 2,071 persons. Cigarettes produced by this factory are also exported to other parts of the country.

The Star Paper Mills Ltd, Saharanpur established in 1937, is engaged in producing different types of writing, printing and packing paper, *sabai*, *baib* and other grass grown in the *bhabar* areas are the chief raw material used. In 1972, the company had a total investment of Rs 902 lakhs with an output worth Rs 551 lakhs and provided employment to 1,794 persons. To meet the increasing demands of paper, caused mainly due to the rapid expansion of education, the company has recently imported heavy machinery from abroad. The goods produced here find a ready market in other States of the country as well.

The modern sugar industry had its modest beginning in the district in the thirties of the present century. At present the district has five sugar mills viz., The Lord Kishna Sugar Mills Ltd, Saharanpur, The R. B. Narain Sugar Mills Ltd, Laksar, The Maha Laxmi Sugar Mills Ltd, Iqbalpur,

The Ganga Sugar Corporation Ltd, Deoband, and The Kisan Co-operative Sugar Mill, Sarsawa. This industry is only seasonal as the crushing of sugar-cane in the mills begins with the harvesting of the sugar-cane crop which starts from the beginning of October and sometimes continues up to the end of April. The total crushing capacity of all the mills is about 6,000 tons of sugar-cane per day. Molasses and bagasse are the by-products of this industry and are respectively used in the manufacture of alcohol and fuel.

The total capital investment on these units amounted to Rs 847.17 lakhs with an output of goods worth Rs 1,347.64 lakhs during the year 1972, as many as 5,618 persons were employed in this industry.

The Pilkhani Distillery Company was established at Pilkhani, in Deoband in July 1959. This unit is engaged in the manufacture of rectified, methylated and denatured spirits, and also country liquor. The molasses required for the manufacture of liquor are obtained from the local sugar mills. In 1972 the total capital investment on this unit amounted to Rs 35 lakhs, with an output of goods worth Rs 17.24 lakhs, 105 persons being employed by it.

The Foremost Dairies Ltd, Kailashpur was established in 1970. The main products of this unit are ghee, milk products, butter etc., which besides meeting the local needs are exported to neighbouring districts. In 1971-72 the unit had a total capital investment of Rs 86 lakhs with an output of goods worth Rs 210 lakhs. It provided employment to 400 persons.

Small-scale Industries

The directorate of industries, U. P. has recorded 600 units of small-scale industries in the district. Some of them are described below :

Wood Carving—The availability of wood from the forests, constituting about 15 per cent of the total area of the district is a great asset for this industry. Twenty-three units scattered over the towns of Saharanpur, Hardwar, Jwalapur, Roorkee and Deoband are engaged in this work. Some units which have become quality conscious get their wood seasoned at the Forest Research Institute, Dehra Dun, to avoid warps and cracks. *Shisham* (sissoo) wood which is now locally seasoned is used and artistically designed into rectangular, square, circular, hexagonal tables which are in great demand. A total capital of Rs 3,31,500 was invested and goods worth Rs 10,48,900 was produced in 1971-72. About 127 persons were engaged in these units.

Wooden Furniture—In the district 58 units, located mainly in Deoband, are engaged in the manufacture of tables, chairs, beds, doors, windows and frames. *Shisham* and *sagaun* wood are generally used as raw materials. The capital investment of this industry was Rs 5,28,745 and production worth Rs 6,92,910 in 1971-72. The industry employed 218 persons.

Ceramics—Due to the efforts made under the Pilot Project Scheme, there are now five units working at Deoband which employ about 15 persons. The Government Pottery Development Centre was established in 1968, this centre imparts training in the art of pottery making, the duration of the training period being one year. There were 9 trainees in 1972 each receiving a stipend of Rs 25 per month and the total capital investment on these units was about Rs 76,260, with a total turnover of about Rs 24,400. Glazed pottery similar in design and quality to that of Khurja is being produced and it is fairly cheap.

Gur and khandsari is an important rural industry and *gur* (jaggery) and *khand* is produced in practically every other village during the sugarcane crushing season. More than 82 units are engaged in the production of *gur* and *khandsari*. In this industry a sum of Rs 42,41,725 was invested producing *khandsari* and *gur* worth Rs 62,94,276 in 1971-72. The total number of persons employed was 1,495. The industries department provides incentive for the use of improved modern type of *kolhus* for better output.

Drawing and Survey Instruments—With the advancement of technical and industrial education this industry has gained much importance in recent years. There were 73 units in the district in 1972, out of which 70 were located at Roorkee. The workers make drawing boards, T.squares and other such articles and sell them to the bigger units. The Directorate of Industries, U. P., has prescribed specifications for instruments like Dumpy level, T. square, drawing instruments, set squares, levelling stoves, prismatic and magnetic compasses, engineers' plan tables, chairs and drawing boards. After inspection they are quality marked and then they are ready for export to different parts of the country. The total investment in this industry was more than Rs 16 lakhs and articles worth Rs 7,81,53,644 were manufactured in 1971-72. The industry engaged 572 persons.

Agricultural Implements—There are 63 units in the district, 39 located in Deoband, engaged in the manufacture of ploughs, harrows, threshers and a number of machines used for irrigation. A total investment of Rs 39,23,159 was made in these units, producing agricultural implements worth Rs 38,39,479. As many as 379 persons were engaged in this work in 1971-72.

Ayurvedic Medicines—This industry has gained importance due to the availability of various kinds of herbs and vegetation from the forests of the district. There are 29 units mainly located at Kankhal and Hardwar engaged in the manufacture of different kinds of Ayurvedic medicines like *Arishtha*, *Chooran*, *Bhasm*, *Anjan* and *Paag*. This industry is doing useful work in reviving the country's oldest system of treatment; although the manufacture of medicines now is based on scientific methods. The capital investment of these units was Rs 11,30,000 and the total production of

different medicines was worth Rs 53,89,000 in 1971-72. The industry engaged 228 persons for its purpose.

Shoe Making—The industry mainly centres round the big towns and cities to meet the requirements of the urban population. The shoes manufactured here are generally made from better quality leather like chrome, calf, *sambhar* and suede. There are 77 units in the district out of which 75 are located in Deoband. Though this industry has mainly a local market, some of the shoes are also sent to the neighbouring districts. A sum of Rs 3,09,248 was invested in this industry, and goods worth Rs 5,51,290 were produced in 1972. This industry is manned by 223 persons. The *desi* type of shoes like *chamraudha* and *chappals* have had a ready and flourishing market in the rural areas of the district since times immemorial. Although made of tanned leather and durable the shoes are crude in finish and design, but being sturdy are generally liked by the village folk. At present 19 units, manned by 476 persons are engaged in these units. The total investment of this industry was Rs 3,30,600, against a total production of shoes worth Rs 24,26,591 during 1972-73.

Leather Tanning—Leather is tanned in 6 units located at Jaroda-Panda and Rajupur in Deoband tahsil. Hides, skins, lime, *reh* and babul bark form the raw material for the industry. The leather produced here is not of superior quality as tanning is still done by the traditional technique, and those engaged in this occupation lack up-to-date technical knowledge. The capital investment of this industry is about Rs 37,500 and tanned leather worth about Rs 1,04,700 was produced in 1972. This industry is manned by 26 persons.

Rice Milling—This district being an important paddy cultivation centre, there are 29 rice mills with hullers and shellers installed, out of which 11 are located in Deoband. The work done is mostly on commission basis, farmers and traders bring their paddy for pounding. Rice-husk is used for feeding animals and burning in furnaces otherwise it has no utility. A sum of Rs 38,06,052 was invested in this industry, when rice worth an amount of Rs 48,28,500 was produced in 1971-72. About 250 persons were employed in this industry.

General Engineering—Repair and overhauling of machines, tractors and tube-well parts are undertaken by 96 units in the district. A sum of Rs 16,11,450 was invested in these units when work done valued to about Rs 21,69,550 in 1971-72.

Radio and Transistor Parts Assembly—There are 26 units in the district, out of which 14 are in Roorkee, 9 in Deoband and 3 in Saharanpur. As many as 90 persons were employed in this industry in 1972, when a capital investment of Rs 4,57,225 was made in these units and transistors and radios worth an amount of Rs 2,24,600 were produced.

Machine Tools and Automobile Parts—Parts of different types of machines and automobiles are manufactured in 8 units, in the district, two being located at Deoband and the other 6 at Saharanpur. An investment of about Rs 3,62,248 was made in this industry, when goods worth an amount of Rs 12,22,500 were produced by 72 persons in the year 1972. The manufactured articles meet only the local demands of the people.

Steel Furniture—There are 21 units engaged in the manufacture of steel almirahs, safes, tables, steel boxes, these being 15 units located in Roorkee, and three each in Saharanpur and Deoband. Rapid progress has been made with growing industrialization, although the manufactured articles mainly have a local market. The capital investment on these units amounted to Rs 1,38,400 with an output of goods worth Rs 1,61,000 during the year 1972. This industry is manned by 78 persons.

Sanitary Materials and Pipe Fitting—Valve cocks, hand pumps, pipes and other sanitary material are manufactured in 9 units in the district—5 at Saharanpur, 3 at Roorkee and one at Deoband. The total investment of these units was Rs 4,87,000 and goods worth Rs 18,03,046 were produced in 1972. This industry was manned by 147 persons.

Bolts, Nuts, Nails and other Metal Products—Bolts, nuts, nails, wire-nails, wire netting, pins, parts of stove are manufactured in 10 units at Saharanpur. A sum of Rs 2,72,900 was invested in this industry, and articles worth an amount of Rs 6,61,800 were produced in 1972. This industry is manned by 76 persons.

Sewing Machines—Assembling of sewing machine parts with imported component is carried on in 4 units, three at Deoband and one at Saharanpur. A sum of Rs 53,200 was invested in these units and machines worth Rs 62,152 were sold in 1972. This industry employed 10 persons.

Cycle Parts—This industry has a local market, and two units located at Saharanpur are engaged in the manufacture of cycle parts and produced goods worth Rs 1,40,000 in 1972, against an investment of Rs 99,500, employing about 20 persons.

Metal Foundry and Metal Products—Hand pumps and tube-well fitting parts are manufactured in 21 metal foundries all located at Saharanpur. A sum of about Rs 2,22,000 was invested in these units when goods worth an amount of Rs 7,14,000 were produced. As many as 125 persons were employed in these units.

Metal Printing and Galvanizing—Printing on metal and galvanizing on sign boards etc., is carried on in 5 units, 3 at Deoband, and one each at Rampur-Maniharan and Saharanpur. A sum of Rs 15,32,625 was invested in these units and work worth Rs 17,90,711 was done in 1972. These units gave employment to 178 persons.

Battery Assembling and Repairing—There are 3 units, two at Deoband and one at Saharanpur engaged in the repair and assembling of batteries and winding of electric motors. A capital of Rs 37,000 was invested, with a total turn over of about Rs 41,600 in these industries in 1972. About 14 persons were employed in these units.

Printing Work—Progress in this field started in the district after 1945, due to the expansion of education and developmental activities of the government. There are 27 printing presses in the district—20 in Roorkee, 5 in Deoband and 2 in Saharanpur city. Work is done on commission basis, and there is constant competition between the presses. The total investment of these units was Rs 2,95,961 in 1972, and printing work worth Rs 4,17,000 was done in 1972. The number of persons given employment numbered 117.

Cold Storage—Fruits, vegetables and food products are kept for preservation in the two cold storages located at Saharanpur. An investment of Rs 3.72 lakhs was made in these units, employing 40 persons in 1972.

Ice Candy—19 units, located in Roorkee, Deoband and Saharanpur city are engaged in the manufacture of ice candy. These units employ about 200 persons during the season, the total capital investment being about Rs 7,67,207 against an output of Rs 5,55,106 in 1972.

Washing Soap—Raw materials like caustic soda, coconut oil, rosin are imported from Delhi and Punjab, and a variety of good quality washing soaps like Nirala, Ganesh and Deepak are manufactured. Work is carried on in 22 units, there being 11 in Saharanpur, and the rest in Deoband, Nagal, Rampur-Maniharan and Manglaur. An investment of Rs 3,12,969 was made in these units against which washing soap worth Rs 6,60,766 was produced in 1972. The soap finds a market in neighbouring districts also.

Brush Making—There is a brush making factory at Saharanpur, which manufactures brushes of various types, for the purpose of cleaning and painting. Pig hair, wood and colours, used as raw materials in the industry, are available in plenty in the district. The industry had a capital investment of Rs 1,47,000, produced articles worth Rs 4,41,000 and employed 10 persons in 1972.

Jam and Jellies—Canning and preservation of fruits and vegetables is carried on in one unit located at Saharanpur. The total investment stood at a sum of Rs 40,000. This unit produced jams and jellies worth Rs 65,000 in 1972. This industry is manned by only 6 persons.

Hosiery—Saharanpur is one of the main manufacturing centres of hosiery products. This industry is of recent growth here. Although the first hosiery factory was established in 1910 and flourished during the world wars it faced post-wars depressions. This industry feeds Delhi,

western U.P. and some areas of eastern U.P. The quality of the product is a little coarser as compared to Kanpur and Calcutta hosiery products due to the district's defective water which does not bring the required brightness. Socks, vests and other garments are manufactured in 7 units in Saharanpur town, some of these units also knit pullovers, one unit is entirely engaged in the making of Kalighat vests, thread being imported. A sum of Rs 1,78,700 was invested in these units in 1972 and goods worth Rs 7,86,000 were produced. This industry was manned by 45 persons.

Straw Board and Paper Board—One unit concentrated at Saharanpur was established in 1955. This industry is engaged in producing straw and paper boards. Bagasse, a by-product of the sugar mills, and *bhabar* grass available from the forests of the district constitute the raw materials. With the expansion of education and industrialization in the country the demand for straw board has greatly increased. A sum of Rs 2,83,000 was invested, and goods worth Rs 4,00,000 were produced in 1972. A subsidiary concern is engaged in producing sand paper, emery paper, garnet paper, flint paper, water proof and abrasive paper, gummed paper, sanding belts and emery tapes. Craft paper is imported, but the other raw materials used in this unit are easily available in the district. The machines being mostly automatic, a very few workers are required in this industry.

Paper Making—Three small units are also engaged in the manufacture of inferior quality paper. An amount of Rs 4,77,200 was invested in the industry and paper worth an amount of Rs 86,43,000 was produced in 1972. About 44 persons were employed in this unit in the same year.

Bone Crushing—In 1966 one unit was established at Tapri for this purpose. Bones of wild animals, the raw material required, are easily available in the district. This unit had an investment of Rs 1,05,000 in 1972, and 19 persons were engaged in this industry.

Paints and Varnish—One unit located in Saharanpur is engaged in the manufacture of different kinds of paints and varnishes. A capital investment of Rs 13,000 was made, when paints and varnishes worth Rs 8,000 were manufactured and 6 persons were employed.

Chemicals—Sulphuric acid and phosphates are manufactured in 4 units located in Saharanpur. The total investment of these units was Rs 1,89,500 and production worth Rs 3,99,900 in 1972. These units have given employment to 29 persons.

Pharmaceuticals—The work of extracting menthol which is an important ingredient of various kinds of medicines, is carried on in one unit at Saharanpur. A capital investment of Rs 25,000 was made in this unit, giving employment to 3 persons in 1972.

Electrical Goods—Miniature bulbs and other electrical goods are manufactured in 5 units at Saharanpur. Goods worth an amount of Rs 54,000 were produced against a capital investment of Rs 57,000 in 1972. As many as 23 persons were employed in this industry.

Photographic and Optical Goods—Photomounts, optical lenses and optical frames are manufactured in 4 units—three at Saharanpur and one at Deoband. A sum of Rs 43,800 was invested and articles worth an amount of Rs 70,500 were produced in 1972 with a labour force of 17 persons.

Cement Jali—One unit concentrated in Saharanpur is engaged in the production of cement *jalis*. A sum of Rs 28,000 was invested and *jalis* worth Rs 42,000 were produced in 1972. This industry is manned by 2 persons.

Lime Kilns—With the increase in population the construction of buildings has rapidly increased. Due to the shortage of cement, lime and *surkhi* is being used as substitutes. Lime is also utilised for white washing purposes. Two units located in Saharanpur are engaged in the production of lime and *surkhi*. Lime stone is imported from Dehra Dun. A sum of Rs 13,000 was invested in this industry and lime worth Rs 35,000 produced in 1972.

Plastic Goods—Toys and other plastic wares are manufactured by 4 units at Saharanpur. These goods have a great demand in the district. A sum of Rs 97,900 was invested in these units, and different articles worth Rs 6,92,500 were manufactured in 1972. This industry employs 26 persons.

Rubber Footwear and Other Products—There are four units in Saharanpur, engaged in vulcanizing rubber and rubber belts, manufacturing rubber footwear, rubber soles and other articles. A capital investment of Rs 3,05,000 was made in these units and goods worth Rs 2,56,000 were produced in 1972, giving employment to 40 persons.

Umbrella—As cloth and ribs are available in the district, one unit in Saharanpur is engaged in the manufacture of umbrellas. In 1972 this unit manufactured umbrellas worth an amount of Rs 2,00,000, and employed about 14 persons.

Candles—Candles sticks are manufactured in 4 units, three at Deoband and one at Saharanpur. The investment in these units stood at Rs 40,000 producing candles worth Rs 90,000 in 1972, 25 persons were employed in these units.

Enamel Works—Two units located at Saharanpur are engaged in the manufacture of enamel wares. The total investment in these units was Rs 4,46,000 and 133 persons were employed in 1972-73. Goods worth Rs 11,72,000 were produced in that year.

VILLAGE AND COTTAGE INDUSTRIES

There are a number of cottage industries functioning in the district. These industries have flourished for long, and gradually modern methods of production are being adopted with the assistance being given by the different agencies of the government. Manufacture of *ban* and rope making, soap, oil *ghani*, baskets, shoes tanned leather, handloom cloth, carpentry, pottery, solar hat, and blankets, *peepee* and *phirkee* is carried on in these industries. Generally such industries are operated mainly by the members of the family.

Ban and Rope Making—*Ban* strings are made from *bhabhar* grass, which is found in abundance, in the forests of the district. This industry is concentrated mainly at Muzaffarabad, Jamalpur, Aurangabad, Mirzapur, Pathrava, Kota Muradnagar and Hardwar. An investment of Rs 7,000 was made, and *ban* and ropes worth Rs 10,000 were produced. The use of the *charkha* is still in vogue, but with the increasing demand for these products modern techniques have been introduced.

Oil Ghani—This industry is mainly centred around Hardwar, Roorkee, Laksar, Bhagwanpur. Oil from oil-seeds is extracted in more than 42 units, out of which 14 are situated in Roorkee town. These units are mostly located in the rural areas and oil presses are operated by animals. Oil cake is a by-product and it is used as cattle feed. This industry received a severe set back as the old type *ghanis* proved uneconomical and the cost of the products produced here was higher than those produced by mills. Hence many village Telis sold off their *ghanis* and *kolhus* and took to other professions. Now the Wardha *ghani* has been introduced. The Khadi and Village Industries Board gives incentives to villagers to use *ghanis* which crush about 40 kg. of seeds in 8 hours. At present there are more than 20 Wardha improved *ghanis* in operation. Tel Ghani Udyogik Societies have been formed to popularise such *ghanis*. An amount of Rs 42,000 was invested only in Roorkee area, and oil worth Rs 32,000 was produced in 1972, 45 persons were employed for this purpose.

Baskets—This is an old industry of the district, 15 units located mainly at Hardwar are engaged in making baskets from plastic and cane which are brightly dyed. A sum of Rs 21,000 was invested in this trade in 1972 when baskets worth an amount of Rs 18,000 were produced. This industry employed 20 persons in the same year.

Handloom Weaving—This is a very old industry of the district. The main weaving centres being concentrated in Deoband, Manglaur and Gangoh. Cotton yarn is generally imported from Delhi, and the local weavers dye these yarns in different shades for which they are paid separately. The old type throw-shuttle is still in use. The goods mainly produced

in these industries are *dhotis*, bed covers, *niwar* and *khaddar*. About 100 units are functioning in the district and manufactured goods worth an amount of Rs 3,15,000 in 1972. The industry employed 225 persons.

Carpentry and Smithy—Agricultural tools, implements, wooden frames for doors, windows and beds, wheels for carts and ploughs are manufactured by 13 units employing more than 50 persons. Simple implements like sickles, spades, axes and cutters are also manufactured by these units. The total investment was Rs 1,20,000 and the goods worth Rs 1,97,648 were sold in 1972-73.

Pottery (Clay)—One of the earliest skills coming out of the inventive human mind particularly in this country. Clay work or pottery is the commonest industry run on cottage lines, the skill passing on from generation to generation. The *kumhar* (potter) is the most indispensable institution in the rural areas and nearly every village has one or two such families catering to the needs of the local community. There is a traditional Hindu belief that clay pots are defiled after being used once and must be destroyed. Black clay which is easily available in the ponds and lakes is the chief raw material for this industry. The equipments used are potter's wheel, moulds, and wooden hammers (*mungris*). The articles manufactured are the ordinary type of pots like *kulhar* and saucer, pitchers and jars, statues of gods and goddesses particularly of Shiva, Ganesh, Saraswati, Lakshmi and Durga. The annual production is worth about Rs 2,20,000.

Bakeries—There are 22 bakeries in the district, engaged in the manufacture of biscuits, bread and cakes. A sum of Rs 9,33,000 was invested in this industry and goods worth Rs 6,78,000 were produced in 1972. As many as 70 persons were engaged in these bakeries.

Phirkee—The raw material for this industry is locally available, *phirkee* a sort of toy is made in two units located in Deoband. Toys worth a sum of Rs 18,400 were produced against an investment of Rs 9,300. As many as 17 persons were engaged in these units in 1972.

Peepee—This is a traditional and unique industry of the district, as it requires neither machines nor tools, excepting a knife. The raw material used is *narkul* growing in the Siwalik forests. Ladies and children assist their male members in making this kind of toy whistle. A total sum of Rs 66,250 was invested in this industry and whistles worth an amount of Rs 1,24,300 were produced in 1972. As many as 206 persons were engaged in this industry.

Industries Promotion Schemes

The government is fully aware of the fact that State aid is essential for producing an industrial climate. The first efforts in this direction were obviously concentrated in areas where the necessary background existed,

and district Saharanpur easily qualified. The governments' duty is to provide the infra structure and then leave it to private enterprise to avail of the facilities available.

Industrial Estates

One of the foremost step taken was the setting up of industrial estates where land, water, power and transport facilities were made available.

There are two industrial estates, one at Deoband, established in 1959-60, and the other at Ramnagar-Roorkee, established in 1966. One more industrial estate is under construction at Hardwar. The estate at Deoband covers an area of 11.04 hectares with 18 units producing motor parts, tractor parts, centrifugal parts, metal-wires, soap, steel almirahs, doors, tables, chairs and rolling shutters. These units produced goods worth Rs 19,83,575 in the year 1972-73, providing employment to about 114 persons. The industrial estate at Roorkee covers an area of 30.22 hectares, 16 units were engaged in producing mainly drawing, surveying and mathematical instruments, chemicals and utensils. There are bright chances for the development of the estate at Roorkee, with the establishment of new ancillary units (for Bharat Heavy Electricals Limited, Hardwar).

These industrial estates provide incentives and facilities to the industrialists, raw material to producers of controlled goods and finance and other marketing facilities for the export items. Advances are also given either for building or for hire and purchase of machines. The estates have one common facility centre where goods are produced or processed.

Rural Industries Project

A project was set up in 1962 at Deoband, covering the Deoband, Nagal, Rampur-Maniharan, Nanauta and part of Laksar community development blocks. The chief aim was to provide technical training in the use of modern devices, and machinery to the indigenous and traditional artisans and to their families in order to make them turn out better products. Training centres were set up for leather-work, weaving, motor mechanics, general mechanics, woodcraft and pottery. Stipends were given to the trainees.

A pilot workshop was also opened to provide training on similar lines. The grant of departmental loans was facilitated and later on active help was given in processing applications for loan from the nationalised banks.

A project officer, aided by a planning-cum-survey officer and instructors was appointed to implement the scheme.

The area of the project has now been extended to cover the whole district and the project officer has now become deputy director of industries

with headquarters at Saharanpur and also looks after the work of the erstwhile district industries officer. Their main functions are to explore possibilities of the development of different types of small-scale industries, to implement the promotional programmes, to identify prospective entrepreneurs and help them in the choice of industries suitable to their aptitude and capability besides helping in the procurement of the facilities provided.

Area Development

With the realisation of the need of an area development approach, the area round about Roorkee was selected for making concentrated efforts.

A senior officer of the department has been appointed as area development officer who with his staff is required to look after the intensive development expansion and diversification of small-scale industries in the area of Roorkee tahsil by providing technical assistance, help in supply of raw materials and hire and purchase of machinery through the National and U. P. Small Industries Corporations, allot plots and sheds in the industrial estates, prepare feasibility studies, liaison work for ancilliary units and subsidiary industries of the Bharat Heavy Electricals Ltd, Hardwar and the Indian Drugs and Pharmaceuticals, Rishikesh, and general assistance in obtaining loans.

The U. P. Finance Corporation at Kanpur provides loans for the setting up of industries and two other corporations, under the agencies of the State government, also situated at Kanpur give promotional aid for the setting up and expansion of industries.

Potential and Plans for Future Development

The district already stands second only to Kanpur in industrial growth. With the provision of the aids enumerated above as also those now provided by the various banks, there is ample scope for further industrialisation of the district. The Bharat Heavy Electricals, Ltd, Hardwar has also helped in creating a favourable industrial climate. A number of additional ancilliary industries like rosin bonded paper, insulating varnishes, cotton tape, rubber products, cotton brushes, non-ferrous extension asbestors tapes, etc., are to be taken up in the near future especially around the B. H. E. L. complex at Hardwar. Being one of the most agriculturally developed districts of the State, many big and small industries utilizing sugar-cane, oil-seeds, rice, may be established. Flour mills, rice shellers, *gur* and *khandisari*, distillery, bakery, chewing tobacco, smoking tobacco, fruits and vegetable preservation, dairying are a few industries for which there is large scope in the district. The Siwalik hills abound with medicinal herbs, wood, lac, gum, grass and hemp, which provide good scope for starting new wood-based, medicine manufacturing, rope making, paper and straw board industries and to rejuvenate the old, indigenous ones. Drawing, survey and mathematical

instruments industry is already flourishing at Roorkee and binocular, spectacles, cameras, microscopes for naval and aeronautical engineering may be easily produced by the existing concerns or by opening new ones in the area. Industrial units for the production of electrical motors, domestic electrical appliances, rubber cable wires, switches, small transformers, enamelled wire, transmission line accessories and components of miniature bulbs, may also be profitably developed. There is also good scope for chemical based industries such as plaster of Paris, polythene bags, plastic goods, bleaching powder, soap and pharmaceutical in the district. Hardwar and Roorkee being tourist centres are visited by people throughout the year, decorative stones, novelties, plastic and wooden toys, photographic material and ready-made garments have a good market in the district.

The existing small-scale village and cottage industrial units producing soap, candle, umbrella and leather goods can be further expanded.

Labour Organisations

There were 61 industrial trade unions in 1971 functioning in the interest of their 65,000 odd members to further good relations between employers and employees, to ensure fair wages, healthy living and working conditions, proper medical and educational facilities to them and their children by the employers.

The district also has three labour welfare centres, two in Saharanpur city and one at Roorkee. The centres provide medical, educational, cultural, recreational and sports facilities for the members of the trade unions.

Labour Welfare—The Indian Trade Unions Act, 1926, the Employment of Children Act, 1938, the U. P. Maternity Benefit Act, 1938, the Minimum Wages Act, 1948, the Employees' State Insurance Act, 1948, the U. P. Industrial Establishments (National Holidays) Act, 1961 and the Motor Transport Workers' Act, 1961 are enforced in the district to ensure the welfare of the workers. In 1973 there were 6 labour inspectors in the district, 4 posted at the headquarters of the district and one each at Hardwar and Roorkee to ensure the administration of labour laws, enforcement of labour welfare schemes and maintaining liaison between the employees and employers.

CHAPTER VI

BANKING, TRADE AND COMMERCE

History of Banking

It is difficult to trace the history of indigenous banking in the area now comprising the district, but from very early times people seem to have been accustomed to the use of credit instruments, such as *hundis*. It is said that Multanis and Shroffs financed internal trade and commerce and worked as bankers to the ruling dynasties in the medieval period. Even foreign trade was financed by these indigenous bankers. Besides money-lending, they did the business of money-changing, when a large number of mints issued metallic currency of various denominations. Forced by the vagaries of the weather which resulted in frequent failure of crops, people were compelled to knock at the doors of the *sahukars* or *mahajans* for help in order to meet their urgent and unavoidable monetary requirements. Valuable articles such as jewellery and land were pawned with money-lenders. The money-lenders of rural areas were more grasping than the urban ones and were always exploiting the misfortune of borrowers.

In the closing years of the last century, rates of interest in the district varied widely with the amount and nature of loan. Generally advances were made to agriculturists in cash or in grain for seed. Loans on personal security and for short period were given, on which interest was charged at a normal rate of Rs 2 per cent per mensem, in rare cases higher interest was also charged. The Bohras generally used to lend on the *kist* system, whereby an advance of Rs 10 was repaid in twenty instalments of one rupee. Simple money bonds, in the case of small loans up to Rs 100, carried from Rs 1 to 3-12 paise per cent per mensem if unregistered, and from Rs 1 to 2 when registered. The latter rate also prevailed in *bahikhata* loan, when silver ornaments were pledged as security, the interest ranged from 75 paise to 1-56 paise per mensem, and about half of this amount was charged when ornaments were of gold. Simple mortgages carried from 75 paise to Rs 2 per mensem, while the estimated rate for mortgage with possession was from 37 paise to 50 paise on the sum advanced. The rate was lower in the case of large loans or approved customers or business transactions between *bantias*. There existed large private banking houses in Saharanpur and elsewhere in the district; the biggest form was that represented by Mani Chand, Sri Ram, Radha Kishan and Jai Narain Bohras of Saharanpur. Saiyid Agha Haider of Saharanpur city, Baru Ma

and Kuramal of Kota, Beni Prasad, Jado Rai and Badri Das of Deoband, Ramanand. Mansab Rai, Ajodhya Prasad of Gangoh and Bhagwan Das and Rani of Landhaura, were some of the influential bankers of the district.

In March 1902 two private banks were started under the management of the zamindars' agents, one at Kailashpur and the other at Landhaura. The former was managed by 12 villages with a capital of Rs 354 but was wound up in 1906. The latter functioned more successfully and its capital was raised from Rs 315 to Rs 800 in a short period. Though unregistered they functioned on the lines of co-operative credit societies. Interest paid on deposits was 4 per cent and that charged on loans was 9½ per cent.

A branch of the district co-operative bank was opened at Roorkee on February 19, 1920, followed by another at Saharanpur on May 21, 1924.

The history of regular modern banking starts with the opening of a branch of the Imperial Bank of India (now the State Bank) at Saharanpur in 1922. Other banks came in at a later date, the Punjab National Bank opened a branch at Saharanpur in 1936, followed by the Central Bank on May 27, 1940. There was a continued spurt in this direction between 1941 and 1956. With the result that in 1973 the total number of branches of various banks in the district was 52.

Total deposits of the commercial banks in the district in 1957, were Rs 1,101 lakhs out of which the Punjab National Bank's deposits were Rs 556 lakhs, i. e., about 50 per cent. The total deposits in the district as on June 30, 1970 were Rs 17,740 lakhs, the chief being the Punjab National Bank Rs 750 lakhs, the Central Bank of India Rs 220 lakhs and the State Bank of India Rs 492 lakhs. These constituted nearly 82 per cent of the total deposits in the district.

Rural Indebtedness

The main occupation of the people of the district is agriculture and at the beginning of this century the economic condition of the agriculturists was not satisfactory. Their holdings were small and the price of agricultural produce was low. Small and impoverished proprietors formed a large proportion of the land-holding community. The normal condition of the proprietary communities was one of struggling poverty, resulting from continuous multiplication of owners and subdivision of land, which took place under the law of inheritance then prevailing. During the First and Second World Wars, cultivators were benefited from the rise in prices of agricultural produce as it increased their purchasing capacity, but the high prices which they had to pay for items like clothes, live-stocks and implements almost neutralised it. The prices of agricultural products continued

rising after the cessation of hostilities but this also did not result in any real benefit due to the increase in population in the district, as elsewhere, and the small peasants and landless labourers still remained in debt and it may be said that indebtedness was almost a normal feature in the economy of an average family. The average cultivator of the district, unless he had inherited some monetary legacy, was in debt and so was the agricultural labour and the landless labourer. Apart from purposes of cultivation indebtedness in the district is also connected with social, religious and traditional obligations, money being borrowed for marriage, *janau* (sacred thread ceremony), *mundan*, funeral ceremonies, and often for litigation and business investment.

Two economic surveys in the villages of Bilaspur and Sadharansar of tahsil Deoband conducted in 1961 revealed certain trends in indebtedness. The following statement shows the extent of indebtedness in village Bilaspur in 1961 :

Total number of households	150
Total number of households in debt	48
Total amount of debts (in Rs)	8,950
Average indebtedness per indebted household (in Rs)	18,645

Thus, about 32.6 per cent of the families were in debt. The highest percentage of households in debt being in the income group of Rs 76—100, the average indebtedness per household in debt being Rs 250 per annum. The survey further revealed that an average debt was incurred to meet financial obligations as indicated below :

Items of expenditure	Amount of debt (Rs)	Number of families in debt	percentage of total expenditure
Marriage	100	1	1
Ordinary wants	1,200	10	13
Cultivation	7,600	36	85
Household industry	50	1	1

Thus, about 85 per cent of the debt was incurred for agricultural purposes.

The position in the other village (Sadharansar) was even worse. 137 of 200 families in the village were in debt, and an amount of Rs 1,07,324 was borrowed by them in the last 10 years (1951-61). The average indebtedness per household was Rs 780 for a year, the highest percentage of households in debt was in the income group of Rs 26-50.

These surveys showed that a large majority (75 per cent) borrowed money for the improvement of agriculture, about 4 per cent for business or litigation, domestic wants accounting for the remainder.

Although there has been no recent survey which may indicate the change in the situation, it can be safely stated that with the increasing attention paid by the government to improvements in agricultural practices, the introduction of high yielding varieties and chemical fertilisers resulting in the produce being considerably augmented, coupled with the constant rise in the price of agricultural commodities, the average income of the cultivator has greatly increased and he can be said to be economically stable and generally out of debt now.

Government also extends help to the agriculturist during calamities such as famines, flood and other distresses. The British government adopted this system and enacted certain Acts, viz., the Land Improvement Loans Act, 1883 (Act XII of 1883) and the Agriculturists' Loans Act, 1884 (Act XIX of 1884) on the recommendations of the Famine Commission of 1880. The agriculturists take loans for the improvement of land, purchase of seeds and fertilizers and minor irrigation. Such loans have been liberally distributed among the peasants on such occasions since the establishment of British rule.

This aid by the government is provided in the shape of *taqavi* loans for purchase of seed, cattle, construction of wells and such like. *Taqavi* exceeding rupees one lakh was given in the district in 1860-61, 1923-24 and 1930-31.

This timely help often serves to prevent the agriculturist from falling into the clutches of a money-lender and to rehabilitate him in cultivation. The amount of *taqavi* distributed in the district from 1969-70 to 1972-73 for different purposes is given below :

Year	Amount of loans (in Rs)
1969-70	39,220
1970-71	49,900
1971-72	1,80,300
1972-73	2,70,000

Debt-relief Legislation

Attempts were made ever since the first quarter of this century to find a remedy for rural indebtedness mainly through legislative measures seeking to regulate the terms and conditions of money-lending.

In 1918 the Usurious Loans Act was passed, which authorised the courts to examine transactions to check if excessive interest was charged. In 1926 by an amendment the Act was made applicable to all parties seeking relief from mortgage. An amendment affected in 1934, made the Act applicable generally, to all debtors and debts and also for the first time provided definite limits beyond which the rate of interest would be deemed to be excessive.

During the economic depression of the thirties, some legislative measures were enforced for scaling down and clearance of debts. The United Provinces Agriculturists, Relief Act, 1934, gave some relief to agriculturists as it provided *inter alia* for payment of debts in easy instalments and at a low rate of interest. The Temporary Postponement of Execution of Decrees Act, 1937, provided for unconditional stay of proceedings for execution of decrees against tenants and those proprietors whose land revenue did not exceed Rs 1,000 a year.

The United Provinces Debt Redemption Act, 1940, provided for the accounting of interest at low rates and protecting the property of the debtors from large-scale liquidation. These measures were, however, availed of mainly by the educated and rich borrowers.

Role of Private Money-lenders and Financiers

The institution of private money-lenders is dying slow but steady death in the district as elsewhere in the country. The reasons are not far to seek. The abolition of the zamindari system, the agrarian reforms, the impetus given by the government to grow more food and usher in the green revolution in the country. The huge economic strides made in the wake of large-scale industrialisation of the district are some of the main factors responsible for the improved financial position of the large mass of the population, the agriculturists and labourers particularly during the last three or four decades.

The stepping in of the nationalised banks, and autonomous financial corporations for providing loans and other financial assistance have rendered the old money-lenders rather redundant. Still they exist in scattered pockets here and there and the rate of interest charged by them usually varies from 25 to 75 per cent per annum.

Co-operative Movement

The co-operative movement was initiated to do away with the indigenous banking system, as well as to remove the economic distress of the

people. Co-operative societies advance loans for different purposes like purchase of seed and fertiliser and agricultural implements, help in proper sale of the agricultural product and save the farmers from the clutches of middlemen.

It was 1904, the Co-operative Societies Act was passed and in 1907 one primary co-operative society was formed in the district. The growth of the co-operative movement was slow in the beginning. Till 1910 the number remained one. The following statement gives an idea of the growth in the number of societies :

Year	No. of primary co-operative societies
1910	1
1920	24
1930	121
1940	261
1950	741
1960	564
1970	564
1972	460

The growth was slow upto 1947 when it received a fillip after the establishment of a popular government. After 1961 these societies were reorganized and bigger multi-purpose societies were constituted, so the total number of societies came down to 464 only in 1970. In 1972, the membership was 1,61,354 persons and an amount of Rs 4,47,56,114 was advanced as loan at the rate of 9 per cent per annum as interest by these societies. In the district 1,81,543 families dependent on agriculture are benefited by such societies.

Co-operative Banks

There are two co-operative banks in the district. The Central Co-operative Bank, Roorkee, established on February 19, 1920, covers the area of Roorkee tahsil, Bhagwanpur, Bahadrabad, Laksar and Narsan. 133 agriculture credit co-operative societies take credit from it and distribute it among its members for agricultural purposes. The cheque system is in vogue.

The following figures for the last three years show the progress made by this bank :

Heads	1969-70	1970-71	1971-72
Share capital (in Rs)	16,91,000	18,50,000	19,33,000
Working capital (in Rs)	1,08,73,000	1,27,07,000	1,35,97,000
Reserved capital (in Rs)	4,11,000	4,65,000	5,12,000
Loan disbursed (in Rs)	82,97,000	98,69,000	1, 3,63,000

An amount of Rs 1,04,93,000 was advanced as short-term loan by this bank during 1972-73, and in the same year Rs 2,89,000 was distributed as short-term loan through the societies and 4,133 new members were enrolled.

The District Co-operative Bank, Ltd. Saharanpur, established on May 1, 1924, covers the area of Saharanpur, Nakur and Deoband tahsils and provides credit to 327 agriculture credit co-operative societies which distribute it amongst its members. Payments are made by cheque to make it convenient.

The progress made by the bank in the last five years is shown in the statement below :

Heads	1967-68	1968-69	1969-70	1970-71	1971-72
Share capital (in Rs)	34,25,000	38,35,000	44,21,000	48,18,000	49,31,000
Working capital (in Rs)	2,19,69,000	2,57,37,000	2,72,27,000	3,02,62,000	3,36,84,000
Reserved capital (in Rs)	4,94,000	4,94,000	4,91,000	6,95,000	8,91,000
Loan disbursed (in Rs)	1,63,84,000	1,92,01,000	2,43,33,000	2,58,91,000	2,70,87,000

An amount of Rs 1,82,16,000 was advanced as short-term loan by the bank during 1972-73 and in the same year under the master plan, an amount of Rs 5,50,535 was distributed as short-term loan through the societies and 14,522 persons were enrolled as new members.

The rate of interest charged on the advances made by both these banks is between 4 to 7½ per cent per annum. A rather disquieting feature is the accumulation of out-standing loans on individuals and co-operatives, which in the Roorkee branch alone was Rs 1,13,93,000 in 1972-73. These banks accept deposits also, the amount of deposits in 1970-71 being Rs 171 lakhs. The profit earned by these banks during 1969-70 was Rs 5,38,650.

The U. P. State Co-operative Land Development Bank has opened its branches at Saharanpur, Deoband, Nakur and Roorkee in the district. The main functions of this bank are to provide long-term credit for the improvement of land, purchase of implements for land improvement, redemption of old debts, planting of orchards and setting up of minor irrigation works. Loans are given against the security of land, and can be repaid in instalments, the rate of interest being $8\frac{1}{4}$ per cent per annum. These banks advanced a sum of Rs 36,63,000 to agriculturists in 1970.

The District Co-operative Development Federation was established in 1948 to link the various local co-operative marketing institutions with the U. P. Co-operative Federation, Lucknow. It is an apex institution of the district with 54 co-operative unions as its members. The important functions of the federation are to make arrangements for the supply of agricultural requisites like fertilizers, agricultural implements and improved varieties of seeds to accelerate the pace of agricultural development. It also helps in the distribution of consumer goods.

In 1950, the share capital of this federation was Rs 40,675 which has risen to Rs 51,000 in 1972, the working capital being Rs 17,27,981. A large number of goods are sold by the federation, the value of total sales amounted to Rs 9,34,696 in 1972.

Kraya-Vikraya Sahkari Samitis—There are six Kraya-Vikraya Sahkari Samitis in the district, located at Saharanpur, Rampur, Manglaur, Gangoh, Jwalapur and Deoband. These Samitis undertake the purchase of agricultural produce from member cultivators and sell them at a time when reasonably high prices may be obtained. In 1972, the total membership of these Samitis was 33,626 and they did business worth Rs 42,74,458.

The Co-operative Consumers' Stores—Two co-operative consumers' stores, one at Saharanpur and the other at Hardwar, have been functioning in the district since 1963. The aim of such stores is to provide goods of daily use at cheaper rates. 36 primary consumers' stores are the members of Saharanpur store, and 8 of the Hardwar store. These stores have a membership of 2,249 persons and sold goods worth Rs 22,75,726 in 1971-72.

There are 28 co-operative seed stores, 76 co-operative housing societies and two rickshaw pullers co-operative societies in the district.

State Assistance to Industries

Assistance is given to industries in the district through branches of the Uttar Pradesh Financial Corporation and Small Industries Corporation, Kanpur, and the National Small Industries Corporation, New Delhi, besides loans given by the nationalized commercial banks.

Commercial Banks

Fifty-two branches of commercial banks are functioning in the district. They charge interest ranging from 7 to 13 per cent on advances and allow interest at rate varying from 4 per cent to 8 per cent per annum.

These commercial banks have started a drive to increase deposits by opening new branches in semi-urban and rural areas. As against only 31 branches in the district in 1969 (5 in rural, 16 in semi-rural and 10 in urban areas) the number had increased to 50 on June 30, 1972 (16 in rural, 22 in semi-rural and 12 in urban areas). In 1973 the number further increased to 52 so that while in 1969 each bank was serving an average population of 60,000, it was serving an average population of 41,000 in 1972. Although there is a steady growth in the volume of deposits there is no significant increase in advances. The commercial banks have geared up the urban economy to meet the needs of the trade and industry but the credit needs of the semi-urban and rural community, still deserves attention.

The amount of deposits in a bank depends not only on the condition of agriculture in the area but also on other factors like the existence of government projects, industrial units and educational institutions. An idea of the increase in deposits of the commercial banks in the district can be had from the figures given below :

Year	Total deposits (in Rs)
1968	50,03,58,442
1970	1,77,40,00,000
1972	2,30,60,00,000

After the nationalization of certain banks, advances are given liberally to different industries, trades and for commercial purposes. These commercial banks in the district advanced Rs 93,70,00,000 in 1972.

The Punjab National Bank has 14 branches in the district, the State Bank of India has 12, the Central Bank of India 5, the Union Bank of India 4, the United Commercial Bank 2, and the Bank of Baroda and Bank of India one each. The first three attract most of the business. In 1957, the Punjab National Bank's deposits were Rs 556 lakhs i.e., 54.4 per cent of the total deposits of Rs 1,101 lakhs of all the commercial banks, the figures for 1970 being Rs 750 lakhs out of the total deposits of Rs 1,774 lakhs. The deposits of these three banks constitute 82 per cent of the deposits of the district.

In the field of making advances also these three banks are at the top. The total advances of all commercial banks in 1970, were Rs 1,483 lakhs, out of which the figure of the Punjab National Bank was Rs 721 lakhs, the State Bank of India Rs 381 lakhs, and the Central Bank of India Rs 343 lakhs. The Punjab National Bank works as the Lead Bank in the district.

National Savings Organisation

The post-office savings bank scheme has been operating in the district since long to tap savings and inculcate the habit of thrift in the people, and making funds available to the government for investment in national reconstruction through the Five-year Plans.

Defence deposits and national defence certificates were introduced to raise the funds for the defence of the country during the Chinese aggression in 1962.

National savings and other small savings schemes have been formulated to tap the savings of those who generally do not deposit their savings in the banks. 61 post-offices in the district give savings bank facility. In 1970, the number of savings bank accounts in the post-offices was 1,09,778 and the deposits with these post-offices was Rs 3,48,47,090.

The following statement gives the amounts invested in different savings schemes in the district in 1972-73 :

Security	No. of accounts	Value (in Rs)
Post-office recurring deposits	3,882	5,90,606
Post-office time deposits	1,375	65,35,614
Cumulative time deposits	2,800	6,81,135
Post-office savings bank	13,720	18,19,670

Life Insurance

The life insurance business was nationalized in September, 1956, and the Life Insurance Corporation of India was set up. A branch office was opened at Saharanpur on 1-9-1956. There are two other branches in the district at Roorkee and Hardwar. The progress of life insurance business of the Saharanpur branch is given below :

Year	No. of lives assured	Total sum assured (in Rs)
1969-70	2,269	1,82,95,500
1970-71	2,815	2,45,14,500
1971-72	3,518	3,26,35,000

Currency and Coinage

In ancient as well as medieval periods coins were generally made of gold, silver and copper. During Muslim rule they were commonly found in the shape of round *mohars* (gold), *rupiya* (silver) and *dam* (copper). Under the British rule the silver rupee, half-rupee and quarter-rupee were in use, all being replaced by nickel coins, besides the copper paisa. Paper currency was also introduced. The intrinsic value of metallic coinage has been gradually diminishing as the market value of the constituent metals being high, there was a tendency to melt the coins for other uses than currency.

The decimal system of coinage was introduced in the district on October 1, 1958, the rupee now has 100 paises. The eight anna, four anna, two anna, and one anna coins have given place to the 50 paisa, twenty-five paisa, ten paisa, five, three, two and even one paisa coins.

TRADE AND COMMERCE

Trade in the past was inconsiderable owing to the lack of effective means of communication. Before the advent of the British the chief highway for trade purposes was the road from Meerut to Punjab through Deoband, Saharanpur and Sarsawa. There were small markets where unimportant gatherings took place once or twice in a week for the disposal of country made articles. Such markets were not registered as trade centres, because they were only collecting and distributing places. The only large centres were Saharanpur, Roorkee and Deoband, while in a lower category were Hardwar, Nagal and Sarsawa. The local markets were Muzaffarabad, Thapal, Ismailpur and Buddha Kheri in Saharanpur tahsil, Manglaur, Landhaura and Bhagwanpur in Roorkee, and Sultanpur, Nakur, Gangoh, Lakhnauti and Ambahta in Nakur tahsil.

Now Saharanpur district is one of the most prosperous district in Uttar Pradesh. Its prosperity is the direct result of interaction of improved agriculture and sound industrial base. About 77 per cent of the population of the district lives in the rural areas and their main source of livelihood is agriculture, agricultural production having risen considerably as a result of the successful implementation of improved programmes. The development of the railway system brought in its wake great increase in the volume of commerce and now Saharanpur is one of the great exporting districts of Uttar Pradesh,

At the close of the last century the main items of export of the district were foodgrains, particularly wheat and oil-seeds, sugar and forest products and the imports were salt, metals and piece goods. The export of wheat was conducted along various routes, grain was sent either to the Punjab and Sind by North-Western Railway or to Bombay by way of Ghaziabad or to Calcutta through Lucknow and Mughalsarai. In 1872 the outward bound traffic of grains was 3,08,000 maunds and after 30 years it had increased to 18,97,000 maunds by the same route. The important manufacture of the district was cotton-weaving in which about 57,000 persons were employed. The trade was carried on throughout the district, both in the towns and villages, the weavers were Hindu Koris and Muslim Julahas. Later on this trade declined due to the competition of European and factory made cloth.

In the field of industrial development also the district is one of the most developed districts of the State, as it has a fairly large industrial base consisting of large-scale industries like sugar, paper, cigarette and distillery factories and a large number of small-scale industries. The wood carving industry earns a fair amount of foreign exchange also. The district is well linked with surrounding districts by road and railway both. There are direct roads and rail links with Hardwar, Dehra Dun, Mussoorie, Chakrata, Ambala, Delhi via Shamli and Muzaffarnagar and Meerut. Saharanpur railway station being on the main line has a direct link with Calcutta, Bombay, Amritsar and New Delhi. The Saharanpur-Shahadhra light railway which served the most economically developed portions of the district for the last 60 years or so was closed down in 1970, but in view of the genuine demand, forcefully reiterated by public opinion, it has been decided to revive it and convert it into a broad gauge line. Work commenced in December, 1973. The district is well linked by metalled roads in the remotest parts also. The banking and transport facilities of the district have helped in the promotion of its trade and commerce.

There is a forest belt of 1,593 hectares in the district, the main forest products being Sheesham, Jamun, Babul, Siras, Saimal, Mahua and Lac etc. The total income earned from these items was about Rs 35 lakhs in 1969-70. These items are mostly exported to different districts after the local consumption.

Exports and Imports

With the establishment of several industries, there has been considerable increase in the exports and imports of the district.

The annual average export of commodities from the district was as follows :

Rice	6,00,000 quintals
Wheat	50,000 „
Gur	40,000 „

Cigarettes, paper, sugar, bones, medicine, ghee, hosiery, rubber belts wood carved articles and drawing and survey instruments are also exported in good quantity.

The figures of the average annual import of some commodities in the district is given below :

Wheat	1,50,000	quintals
Gram	1,00,000	„
Pulses	2,00,000	„
Oil-seeds	80,000	„
Potatoes	1,50,000	„
Coarse grain	1,00,000	„
Cotton yarn	10,000	

Machinery parts, general merchandise, paints and varnish, building material, cement, coal, plastic goods and iron and steel are other items that are imported in a fairly large quantity.

Trade Centres

The district has numerous trade centres for distributing goods, whether, imported or locally produced. Each tahsil has its own trade centre for the purchase and sale of goods and markets are held once or twice a week at important places. Broadly speaking, there are three types of *mandis* (markets) primary, secondary and terminal. Primary markets function mostly as produce assembling markets, and a large part of the produce comes from neighbouring villages. Secondary markets are regular wholesale markets which mostly assemble produce from primary markets or distribute it among them or perform both these functions. Terminal markets function mostly as produce distributing markets, a large part of the produce coming from secondary markets.

Saharanpur is a secondary market and is a consuming market with regard to *urd*, *moong*, oil-seeds, gram and their products, dal *arhar*, cotton seeds, jowar and cotton. It is an assembling market in respect of wheat, gram, rice, *gur*, *bajra*, maize and barley. There are three old *mandis* in Saharanpur, the oldest market for agricultural commodities being Purani *mandi*.

which is also known as Shivpuri, the other two *mandis* of Moreganj and Shahidganj developed afterwards. The Moreganj *mandi* was founded by the then collector after whom it is named.

There are at present 9 main markets besides 13 sub-markets in the district as shown below :

Main market	Sub-market
Saharanpur	Behat
Chhutmalpur	Biharigarh
Hardwar	Bahadurabad
Roorkee	Bhagwanpur
Manglaur	Jhabrera
	Landour
	Laksar
Deoband	Ramse
Rampur Manikbaran	Nanauta
Gangoh	Nakur
	Ambahta
	Titron
Sultanpur	Sarsawa

The village *hats* are numerous and well distributed all over the district. Such markets are held on fixed days of the week and supply goods of every day use to the villagers ; cattle are also sold and bought in some of these markets. There are 48 such markets in the district.

Price Control and Rationing

During the Second World War, prices of all commodities rose and to alleviate the hardship to the public the prices of a large number of commodities were controlled and supply of many goods rationed in order to check a further rise in prices. The important commodities thus controlled or rationed, were food-grains, cloth, sugar, fire-wood, kerosene oil and cement. Licences were given by government to dealers of such commodities. Various schemes for the rationing of food-grains, mainly wheat and its products, rice and sugar were tried during the war. The need for the continuance of rationing of wheat and its products, rice, sugar and kerosene oil has, however, persisted ever since, and at present there are 146 fair price shops in the urban areas and 157

sugar shops in the rural areas of the district, out of these shops 62 fair price shops in urban areas and 10 sugar shops in rural areas are run by the co-operative organization.

Fairs

Several fairs are held in the district, the Kumbh and the Ardh-Kumbh being the important religious fairs held at Hardwar, which fall after 12 and 6 years respectively. Smaller, local fairs and gatherings are held nearly in all the towns and villages in the district particularly on the occasion of the religious festivals of Hindus, Muslims, Sikhs, Jains and other communities, like Holi, Dewali, Dasahra, Id, Muharram, Guru Nanak's birthday, Lord Mahavira's birthday and so on. On these occasions brisk trade and commercial activities are noticeable.

A number of places in the district, like Rajupur, Bundhi, Sarsawa, Shahjahanpur and Bhagwanpur are famous for their cattle fairs and a large number of cattle from areas in and around the district are brought here.

Weights and Measures

In the first decade of the present century a variety of weights and measures were in use. The standard *ser* of 80 tolas was used at the railway station and in the main towns and villages of Roorkee, Bhagwanpur and Jwalapur. In other parts a *ser* of 86 standard tolas was the most common, excepting in the parganas of Deoband, Nagal and Gangoh, while in the town of Ambahta the *ser* was ordinarily of 88 tolas. In Manglaur and some portions of Roorkee and Bhagwanpur, the *ser* was of 90 tolas. For measuring land the unit was the bamboo rod or *gatha*, of which twenty go to the *jarib* or chain, the latter being $49\frac{1}{2}$ English yards. This gave a *pucca bigha* of 2,450.25 sq. yard. The English yard of 36 inches was in general use; but at some places the yard used by tailors and cloth merchants was *Ilahi gaz* of $37\frac{1}{2}$ inches, and that used by architects, builders and timber merchants was the *bahadur shahi gaz* of 35 inches, though in Deoband tahsil its length was given as $34\frac{1}{4}$ inches. Till 1959, the weights in use were maund, seer, *chatak*, tola, *masa* and *ratti*, and the measures were in mile, furlong, yard, foot and inch.

The metric system of weights and measures was introduced in the district with effect from October 1, 1960 and now only metric weights—the milligram, gram, kilogram, quintal and metric tonnes, and measures—millimetre, centimetre, metre and kilometre are legal tender.

In the interior of the district, as in other districts, the old weights and measures are still in use but with vigorous and continued efforts made by the enforcement staff the metric system is expected to totally replace the old measures.

CHAPTER VII

COMMUNICATIONS

TRADE ROUTES AND HIGHWAYS AND MODES OF CONVEYANCE—OLD AND NEW

The most renowned of the imperial roads during the rule of the Mauryas connecting Takshashila with Pataliputra (Patna) passed through the south-western part of the district and probably joined the ancient towns of Sarsawa and Deoband. Hiuen Tsang, the Chinese traveller, followed this route during his visit to Mandawar (district Bijnor). It also finds a mention in the accounts of Alberuni (970—1030) and the memoirs of Timur and it was on this route that during the reign of Muhammad bin Tughluq was founded the city of Saharanpur. A branch of this route led to the ancient town of Baran (Bulandshahr) and thence to Mathura and Kannauj and was followed by Mahmud of Ghazni during his campaign in 1080 A. D. Yet another branch presumably led north-eastward to Kalsi in district Dehra Dun even as early as in the reign of Asoka.

Another ancient route passed eastward from Thaneshwar and running along the foot of the Siwalik hills led to Hardwar and thence to Ahichchhatra, an ancient town in district Bareilly.

During the reign of Akbar after the formation of the sirkar of Saharanpur the importance of the road connecting Sarsawa, Saharanpur, Sarot or Sarwat (Muzaffarnagar), Meerut and Baran (Bulandshahr) considerably increased and several new towns were founded and serais constructed. By this time the headquarters of the *dasturs* and *mahals* were connected with each other by means of roads. A road leading northward from Saharanpur connected Behat, a place of great antiquity. Another road leading eastward from Saharanpur connected Bhagwanpur, Roorkee and Jwalapur (all being the headquarters of Akbari *mahals*) and the ancient town of Hardwar. Yet another road passed south to Rampur and thence led to Kairana, then the headquarters of a *dastur* (district) and now falling in district Muzaffarnagar. Gangoh, an ancient place and the headquarters of an Akbari *mahal* in the south-western part of the district was also connected with Saharanpur. The road leading north-westward from Saharanpur connected Chilkhana and formed part of the ancient route to the Punjab. From its strategic position on the old highway, Chilkhana held a garrison of troops maintained by Begam Samru.

From Deoband, the headquarters of a *dastur* (district), and a large Akbari *mahal*, a road led north-eastward to Manglaur, an ancient town and

the headquarters of a Akbari *mahal*, and thence passed on to Roorkee and Hardwar. Another road from Deoband led westward to the ancient towns of Nanauta, Gangoh and Lakhnauta, each being the headquarters of a *mahal* of the same name. The road running along the old high bank of the Yamuna from north to south connected Sultanpur, Sarsawa, Nakur and Gangoh and passed on to Kairana.

Before British rule, the roads of the district were in poor condition and the majority of them were used in fair weather only. With the establishment of British rule, new roads both metalled and unmetalled were gradually constructed. In the beginning of this century the unmetalled roads were extremely numerous, and were often of inferior type. Cross-country communication was particularly difficult in low-lying river valleys and in the tract beneath the Siwalik hills, where progress was constantly checked by the numerous hill torrents. In 1907, the total length of roads in the district was about 533 miles (857.78 km.). These roads included provincial, local and other roads. There were three provincial roads, the first was the trunk road from Meerut to Dehra Dun traversing 78 km. The second ran between Saharanpur and Dehra Dun crossing the Hindan at Gagaheri, and the third connected Saharanpur with Chakrata, Mirzapur and Badshahibagh.

The local roads had a length of about 699 km. of which nearly 33 km. were metalled. The metalled roads were confined to the vicinity of Saharanpur with the exception of the approach roads to the railway stations of Sarsawa and Deoband. Of the unmetalled roads 465 km., were described as second class roads, bridged and drained throughout, 117 km. as fifth-class roads, cleared, partly bridged and drained, while the remaining 84 km. consisted of sixth-class roads, cleared only.

In 1915, the total length of roads in the district remained the same, but in 1921 the length increased to 883.53 km.

In 1947, the district had about 177 miles (285 km.) metalled roads, out of which 137 miles (220 km.) were under the public works department and 40 miles (65 km.) under the district board which were gradually taken over by the P.W.D. A number of village roads were also constructed by *shramdan* (voluntary labour).

During the period from 1947 to 1963 about 220 km. unmetalled roads were metalled by the public works department, the length of the old metalled roads repaired and remetalled being about 45 km. Another 22 km. of metalled roads constructed through *shramdan* were also taken over. The roads of the district are now classified as State highways, major and other district roads and the roads belonging to the Zila Parishad. The State public works department is responsible for the maintenance of the State highways, the major district roads and some other roads, while

the local bodies and other departments maintain the roads lying within their jurisdiction.

At present there are in the district 221 km. of State highways, 272 km. of major and other district roads, 35 km. *shramdan* roads, 52 km. cement concrete tracks around the sugar factories, besides 37 km. of metalled and 351 km. of unmetalled roads under the control of Zila Parishad.

State highways connect Delhi, Meerut, Chamoli, Dehra Dun, Ambala and Uttar Kashi districts. These roads are metalled and painted. The major district roads connect the different tahsils of the district. Village roads connect various places but their condition is poor and they are generally unmetalled.

A detailed statement showing the roads having a length of 5 km. or more with their lengths in the district in 1971 will be found at the end of the chapter.

MODES OF CONVEYANCE

No authentic account is available of the conveyances used in the district in the early days, but it appears that palanquins, horses, ponies, camels, elephants and carts and carriages drawn generally by bullocks, horses and buffaloes were used as vehicles. Till the first quarter of the present century the rich kept horses, elephants, picturesquely decorated *bahli*, *rath* and *bharkas* whereas ekkas and tongas served the need of common people. Buggies and four-wheeled carriages, containing ornamental wood work in their frames and covered with fine curtains, were owned by jagirdars and well-to-do persons. *Dolis* (litters) or *palkis* (palanquins) appear to have been in use since the remote part.

Tongas and *tamtums* pulled by ponies or horses were generally used in the urban areas some decades ago. With the development of roads a number of cheaper and faster vehicles came into use. The bicycle came into use as a means of transport in this district early in the twenties of this century, and is now the most popular means of conveyance both in the urban as well as the rural areas of the district.

The cycle-rickshaw came into vogue after the Second World War and is now a very common means of conveyance in the urban areas and even some of the suburbs. Licences have to be obtained, for the rickshaw and its driver for plying it within the jurisdiction of the local body. The municipal boards charge annually a certain amount of money per cycle-rickshaw from the owner and a nominal amount from the drivers as a licence fee.

The following statement gives the number of vehicles of different kinds registered with the municipal board, Saharanpur in 1972 :

Vehicles	No. registered
Bicycles	16,889
Cycle-rickshaws	2,756
Tongas	344
Carts	1,480

In the rural areas bullocks, buffaloes and ponies continue to be the beasts of burden and carts drawn by them are also used to carry goods. Boats are used to cross the rivers, carrying passengers and goods. With the introduction of cycle-rickshaws and increase in the prices of grass and gram the animal driven carts and the tongas are declining in number.

Porters are available in the urban and rural areas. On an average a porter carries a load up to 50 kg. In most cases, however, the rate is decided by the parties concerned by mutual bargaining depending upon the weight of the load and the distance to which it is to be carried.

Vehicular Traffic

With the beginning of the second decade of this century motor vehicles, mainly lorries and trucks started plying in the district and gradually their number increased and now they operate on all the main routes of the district and to adjoining districts.

After Independence the volume of goods traffic has considerably increased consumer goods, agricultural produce and other articles are imported and exported on trucks. As many as 163 private buses also operate on many routes in the district, they are available at Hardwar, Roorkee, Saharanpur and other places. Most of the trucks and private buses operating in the district belong to private transport companies or co-operative unions. Most notable of which are the J.B. Transport Union, the Brij Transport Company, Raj Transport Company, Punjab Transport Company, and the Vijay Luxmi Transport Company. The freight is usually settled by the parties concerned. On an average a truck carries goods about 70 to 80 quintals in weight. Private passenger buses are in good condition and are quite comfortable. Taxis are also available for the transport of passengers at Saharanpur, Roorkee and Hardwar specially during summer and the pilgrimage season.

In 1970 the number of various kinds of vehicles plying in the district was as follows :

Vehicles	Number
Trucks	763
Private Buses	163
Motor vehicles	3,749
Scooters and Rickshaws	9,636

U. P. Road Transport Corporation—The U.P. Government Roadways started running passenger buses in this district since 1947, initially operating on the Dehra Dun-Saharanpur route only.

With the development and improvement of roads and increasing passenger traffic, Government roadways bus service has been extended to 16 routes operating through Saharanpur depot. The Government roadways are now operated by the State Road Transport Corporation formed in June 1972. The following statement gives the number of buses operating on each route in 1972 :

Route	No. of buses plying in 1972	Approximate length of route (in km.)
Saharanpur-Hardwar	13	80
Saharanpur-Landhaura	1	65
Roorkee-Jabarhera	2	25
Saharanpur-Delhi	24	164
Saharanpur-Rampur	1	21
Saharanpur-Shamli	1	66
Saharanpur-Ghaziabad	21	173
Shamli-Delhi	4	98
Shamli-Barout	5	42
Khandla-Delhi	1	83
Barout-Delhi	6	56
Baghpat-Delhi	7	39
Khekhera-Delhi	6	32
Maudola-Delhi	1	23
Loni-Delhi	1	15
Chhutmalpur-Kalsia	4	23

As many as 70,70,783 passengers were carried on these routes in 1972. A city bus service has been recently introduced in Hardwar, mainly for the benefit of pilgrims.

Railways—The first railway constructed in the district was the portion of the Sind-Punjab and Delhi Railway between Meerut and Ambala, which was opened on the 1st January, 1869. It was amalgamated with the North-Western State Railway in 1886. In the same year the Oudh and Rohilkhand Railway was extended up to Saharanpur and a branch line was also opened between Laksar and Hardwar. On the 1st of March, 1900 the last mentioned line was extended from Hardwar to Dehra Dun. The Shahadbra-Saharanpur Light Railway was constructed by Messrs Martin Burn, Ltd and was opened to traffic in 1907. In 1925, the Oudh and Rohilkhand Railway was taken over by the East Indian Railway. In 1951 when the railways were nationalised, the lines passing through the district were placed under the Northern Railway zone but the Shahadbra-Saharanpur Light Railway continued to run under the management of Messrs Martin Burn, Ltd till it was closed down on September 1, 1970 by them owing to heavy losses. It passed through a thickly populated, well-irrigated and highly productive tract. Its closure resulted in great hardship as difficulty was experienced by the people of the area especially in the transportation of goods. It has accordingly been decided to revive it but convert it into the broad gauge line. Work was started on it on December 3, 1973.

At present the main line of the Northern Railway from Lucknow to Amritsar enters the district in the south-west and runs north-westward with stations at Raisi, Laksar, Dausni, Landhaura, Dandhora, Roorkee, Iqbalpur, Chodiala, Balia Khera, Saharanpur, Pilkhani and Sarsawa in this district. From Laksar a branch line runs to Dehra Dun with stations at Aithal, Pathri, Jwalapur and Hardwar.

The Saharanpur-Delhi branch line runs southward from Saharanpur with stations at Tapri, Nagal, Talberi Buzurg and Deoband and the Shahadara-Saharanpur line runs south-westward from Saharanpur with stations at Manari, Rampur, Sona Arjunpur and Nanauta in this district.

Ferries—There were numerous ferries on the different rivers passing through the district. In 1907, the number was 14, all maintained by the then district board. With the construction of bridges a number of ferries have ceased to operate. In 1972 only one ferry was maintained on the Ganga by the district board, which yielded an income of Rs 30,500 in that year.

Travel Facilities

There are many dharmshalas for the stay of travellers at Saharanpur, Hardwar and other urban centres of the district. Hardwar has numerous

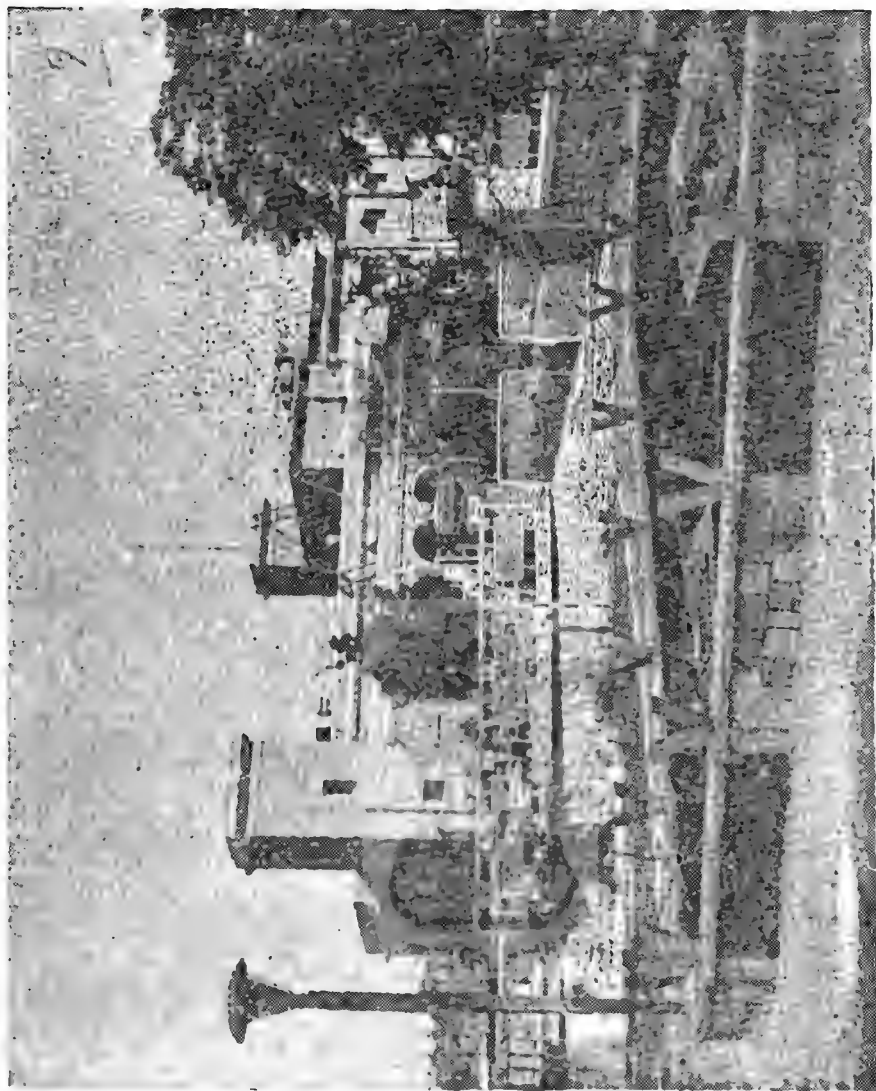
dharmsalas, which are privately managed and a nominal rent for lodging is charged. A traveller has to make his own arrangements for board. The Putli Dharmsala, the Nemi Chand Ki Dharmsala and the Maluk Chand Ki Dharmsala in Saharanpur town and the Kali Kamliwala Dharmsala, the Lucknow Dharmsala, the Karnatak Dharmsala, the Sind Panchayat Dharmsala, the Nanak Devi Dharmsala and the Gandhi Harijan Dharmsala, are important ones in the district. Some of these dharmsalas have more than 70 rooms and are equipped with electricity, attached bathrooms and flush latrines, etc. The rooms are well ventilated and airy.

In the beginning of this century there were staying bungalows in the district for the use of travellers mainly on the roads from Saharanpur to Mussoorie and Chakrata, but later on they were converted into inspection houses for the use of officials. There were dak bungalows at Saharanpur, Roorkee and Hardwar. There was also an inspection bungalow of district board at Gangoh. Besides these there were certain government encamping grounds at Fatehpur, Mohand, Kalsia, Badshahibagh, Deoband, Nagal, Saharanpur, Sarsawa, Sikandarpur, Daulatpur and Bahadurabad.

There are a number of inspection houses, rest-houses, and dak bungalows in the district which are maintained by different departments of government. They are meant chiefly for the use of their own officers but officers of other departments as well as members of the public or tourists are given accommodation if it is available. The canal department maintains 23 inspection houses, public works department 10, forest department 5, district board and hydel department one each. About rest houses forest department maintains 3 and soldiers', sailors' and airmen's board one. District Board has one dak bungalow. There are two guest houses, one is maintained by university of Roorkee and other by municipal board Roorkee.

There is now a good tourist bungalow at Hardwar, having 10 well furnished double bedded rooms at moderate rates. The tourist officer posted here looks after it.

There are numerous hotels in Saharanpur, Roorkee, Hardwar and other urban centres which provide accommodation and board. Some of these hotels are of good grade and are equipped with amenities like shower baths, hot and cold water basins and luxurious lounges. The rooms are well ventilated and have attached bathrooms. Some of these hotels have also Bars attached to them The Kwality hotel and Punjab hotel of Saharanpur town, Gurdev hotel and Palace hotel of Hardwar and Polaris hotel and Madras hotel of Roorkee are quite famous in the district. For accommodation the rent varies from Rs 5 to 40 per day per room. Generally these hotels are visited by well-to-do agriculturists, sales representatives, industrialists and tourists. In addition there are many restaurants and tea-stalls which provide food-stuff and snacks.



Canal Dam Inspection House, Mayapur, Hardwar

POST AND TELEGRAPH AND TELEPHONES

Subsequent to the annexation of this region by the British in 1803, an imperial mail line was created between Agra, Meerut and Saharanpur, which later on extended to Mussoorie and Ambala also. The north-western postal circle was formed in 1838, a dak cess was levied and a force of runners was recruited for the carriage of mails between Saharanpur and the outlying police-stations. The official correspondence was conducted through the agency of the police. Till 1845 there was no regular means for sending private letters in the district. The management of the district post offices was in the hands of local officials till 1864. Under the Post-Office Act of 1866, all the old district offices were gradually converted into imperial offices and mail lines were taken over for the most part by the imperial postal authorities.

In 1866, there was only one telegraph office at Roorkee, and a combined post and telegraph office functioning at Saharanpur head office, Saharanpur city, Deoband, Manglaur, Hardwar, Jwalapur and Kankhal.

By 1909, there were 41 post-offices, with a head office at Saharanpur. Before the advent of railway mail service, the bags were carried by runners to the different places in the district, but on the Mussoorie route it was carried on carts.

There were 225 post-offices and 28 telegraph offices in the district in 1972. The number of post-offices per lakh of population was 11.2 in that year.

The district is well served by telephones also. The number of telephone connection per lakh of population was about 175 in that year.

Broadcast Receivers

People of the district, as in other parts of the country, generally started the use of radio sets in the early thirties of this century. Transistors and radios are becoming more and more popular in the rural areas and a cyclist on a rural road, carrying a transistor, opened to its full volume, is a common sight now.

List of Roads (of 5 km. or more)

Reference p. no. 181

Road	Length in the district (in km.)
State Highways	
Route No. 45 :—Delhi-Meerut-Roorkee-Hardwar Karanprayag-Joshimath	
(a) Roorkee-Hardwar Section	31
(b) Delhi-Mussoorie Road	20
(c) Hardwar-Badrinath Road	5
Route No. 55 :—Ambala-Saharanpur-Dehra Dun- Mussoorie Road	
(a) Saharanpur-Ambala Road	23
(b) Delhi-Mussoorie Road	23
(c) Saharanpur-Dehra Dun Road	23
Route No. 57 :—Delhi-Baghpur-Saharanpur- Lakhwar-Jamnotri	
(a) Saharanpur-Chakrata Road	54
(b) Saharanpur-Baghpur-Delhi Road	37
Other Roads	
Muzaffarnagar-Saharanpur Road	42
Saharanpur-Nakur-Gangoh Road	38
Iqbalpur-Jabarhera-Gurkul-Narson Road	24
Deoband-Nanauta Road	23
Delhi-Mussoorie Road	21
Fatehpur-Muzaffarabad-Kalsia Road	20
Gangoh-Titron Road	15
Jwalapur-Laksar Road	14
Bengi-Saharanpur-Aplona Road	13
Nanauta-Jayaudha Pandey Road	10
Iqbalpur-Asafnagar Road	10
Kankhal-Jagjeetpur-Pherupur Road	10
Bhagwanpur-Chudiyala Road	9
Deoband-Manglaur Road	7
Manglaur-Landhaura Road	7
Hardwar bye pass Road	7
Laksar-Badshahpur Road	6

(Continued)

Road	Length in the district (in km.)
Deoband-Rankhandi Road	6
Nanauta-Tikrol Road	6
Iqbalpur-Pohana Road	5
Janta Road	5
Roorkee-Landhaura Road	5
Roads under the control of Zila Parishad	
Lakhoor-Manglaur	31
Sarsawa-Nakur-Gangoh	31
Janta Road	31
Bargaon-Rampur-Islamnagar-Ambahta	28
Bhagwanpur-Dhanori	23
Bahadurabad-Hardwar	14
Roorkee-Bahadurabad	13
Gagalheri-Bhagwanpur	13
Gangoh-Lakhnauti	13
Landhaura-Laksar	13
Manglaur-Deoband	13
Saharanpur-Chilkana Road	12
Fandpuri-Ambahta	11
Roorkee-Jabathera	11
Sarsawa-Chilkana	11
Sangatheda-Rampur	11
Deoband-Bijnor	10
Manglaur-Majrighat	10
Saharanpur-Nangal Road	9
Biharigarh-Bugawala	8
Manglaur-Sadholi	8
Gagalheri Bhagwanpur	8
Bhagwanpur-Sakrodha	8
Hebat-Shakumbri Devi	7
Nanauta-Birkheri	5

CHAPTER VIII

MISCELLANEOUS OCCUPATIONS

According to the census of 1901 about 47 per cent of the population was directly supported by agriculture, grazing and care of animals, whether in the capacity of landlords, tenants, stock-breeders or herdsmen. The number was the lowest shown by any district of the State and was accounted for by the fact that the industrial population of the district (20·8 per cent) was proportionally larger than anywhere else. It included all those who manufactured or supplied food and drink, fuel and forage, and those engaged in the production of textile fabrics and dresses, earthen and stoneware, wood, cane and jungle products, metal and leather goods. The third place was taken by general or unskilled labour, other than agricultural, which comprised 13·8 per cent of the entire population. Those in personal and domestic service formed 9·5 per cent, the professional class constituted 2·8 per cent whereas 2·5 per cent came under the head of commerce, transport and storage. This latter figure was swelled up by the existence of numerous railways and canals, the actual commercial population being 1·6 per cent, a figure exceeded only in Varanasi and Aligarh. The two remaining sections of government and other public services comprised 1·5 per cent while 2·1 per cent were those whose means of subsistence was independent of any occupation and included those ranging from persons of private means to prisoners maintained at State expense.

AGRICULTURE AND INDUSTRY

In 1911, the total agricultural population was 4,34,543 which rose to 5,24,507 in 1921. The 20 per cent increase between 1911 and 1921, was due chiefly to the rise in prices of agricultural produce between 1914 and 1921 owing to the First World War, which caused a movement of labour back to the land and also resulted in such an appreciation in agricultural incomes that in many cases where agricultural income had formerly been subsidiary it rose to be the principal one. Between 1921, and 1931, the reverse process started. Although crops were generally good until 1928 and prices ruled high till 1930, the adverse seasons and collapse of the price-level at the end of the decade drove people away from the land and back to the towns, and so reduced agricultural incomes that it was no longer considered to be the principal source of livelihood. There was again an increase in the prices of agricultural produce and the number of all agricultural workers which was 2,19,602 in 1951, rose to 2,46,901 in 1961 and to 3,85,362 in 1971. The actual number of workers in industries of all kinds showed a decrease from 86,848 in 1921 to 65,759 in 1951. Industries suffered during

this period of thirty years, the decrease mainly occurring under textiles. In 1961, with the general growth and expansion of industries, the number of industrial workers swelled to 79,997, registering an increase in almost every sector but it again came down to 65,398 in 1971.

TRANSPORT, STORAGE AND COMMUNICATIONS

In 1951, workers in transport operations showed marked increase of 81 per cent above the figure for 1921. The percentage further increased to 171 in 1961, the number of workers under this head in 1971 being 21,181. About 58.9 per cent of the workers were engaged in transport by road, 40.7 per cent in railways and the rest in transport by water. The number of persons employed in mechanically driven vehicles has increased several times over what it was thirty years ago. There are approximately 2,500 cycle rickshaw drivers and 1,500 motor vehicle drivers now. Palki bearers and owners have decreased considerably during this period.

TRADE AND COMMERCE

Persons engaged in trade and commerce which included all sorts of wholesale and retail trade showed a steady and gradual increase since 1921. The total number of workers in this class was 38,477 in 1971 as against 33,987 in 1961, 31,494 in 1951 and 28,001 in 1921.

PUBLIC ADMINISTRATION

The total number of persons in public services, including police, was 3,367 in 1921, of whom 2,307 were employed by the State and Central Governments and the rest were in the police. In 1951 the number employed by the State administration was 1,026 and by the Union Government 6,578, swelling in 1961 to 3,830 and 10,968 respectively. The number of persons in the police force also rose from 1,094 in 1951 to 1,569 in 1961.

LEARNED PROFESSIONS

Education

Teaching is generally considered to be an important and honourable profession. In early days, it was associated with hereditary classes of persons who taught children in their village schools. usually called *pathshalas* and *maktabs*. It was an act of philanthropy and no regular tuition fee was charged from students. Now the educational system stands completely changed. The modern system of education has gradually replaced the traditional class of village school teachers by salaried school and college teachers.

The total number of teachers of all kinds in 1921, in the district was 727, including 71 women. This number did not include clerks and other non-teaching staff employed in educational institutions. In 1961, the number

of teachers increased to 6,917 including 907 women. Of these 4,300 were employed in primary and middle schools, 1,086 in secondary schools, 276 in degree colleges and 1,255 in other institutions. Under the programme for expansion of education, the number of teachers in 1973 in primary and middle schools increased to 5,143 and in secondary schools and degree colleges to 2,508.

Since 1964, the Triple Benefit Scheme has been extended to State-aided institutions run by local bodies or private managements, bringing the advantages of contributory provident fund, compulsory life insurance and pension, including family pension, to teachers. Free tuition to wards of teachers up to intermediate classes, assistance from teachers' welfare funds, reservation of seats in T. B. Sanatorium, Bhowali and in certain cases free residential quarters and some other benefits enjoyed by the teachers.

Medicine

Before the advent of the British, *vaid*s and *hakims* ministered to the needs of the public. It was only after the freedom struggle of 1857 that allopathic dispensaries came into being and their number began to increase later on. The Ayurvedic and Unani systems, therefore, began to lose ground gradually.

In 1921, there were 391 medical practitioners of all kinds including dentists and veterinary surgeons, and 342 midwives, vaccinators, compounders, nurses, etc. Their number increased to 1,178 and 1,299 in 1961. At the end of 1972, the State hospitals and dispensaries employed about 224 allopathic doctors, 10 *vaid*s, 4 *hakims*, 36 midwives, 64 female welfare workers, 38 nurses and 117 compounders.

Generally no consulting fee is charged by private doctors and physicians, but the cost of medicine charged includes consultation and examination fees as well. The earnings of a private doctor invariably depend on his reputation and efficiency.

Law

The profession of law is one of the leading professions of the town and lawyers occupy quite a high status in the social life of the community. They supply active leadership in almost all spheres of public activity, especially in the field of politics. The profession is very crowded. Even retired judges and former government officers possessing a law degree are found quite often practising in the courts.

In 1921, there were 145 lawyers of all kinds including law agents and *mukhtars*, and by 1961 the number had risen to 229. The number of lawyers only further went up to about 500 in 1971. Most of the lawyers reside in Saharanpur city as all the important courts are located here.

Besides the courts of the district judge, other judges and *munisifs* and magistrates, some lawyers also practice in the offices or courts of the sales tax officer, rent control and eviction officer, consolidation officer and income-tax officer.

Engineering

Engineering services in this district are represented mainly in four branches, the building and roads, the irrigation, the local self-government engineering and the hydro-electric. In 1971 these branches had about 45 engineers. Besides a number of engineers are serving the engineering university at Roorkee. The municipal boards of Saharanpur, Roorkee, Hardwar and Manglaur and the Zila Parishad have one to two engineer each and local self-government engineering department have five engineers. There are also a large number of junior engineers, linemen and draughtsmen in these branches. Industrial establishments of the district also employ qualified engineers and diploma holders. There are also some private engineers, architects and surveyors who are working independently.

DOMESTIC AND PERSONAL SERVICES

Domestic Servants

A large proportion of those employed in personal services is comprised of domestic servants whose number, as indicated by 1961 census, steadily increased with the rise in population. They are unskilled workers and their wage is generally low as compared with those of other occupations. They render whole-time service as well as part-time. Whole-time domestic servants are employed only by well-to-do persons belonging mostly to the business community or by high officers. Part-time domestic servants are commonly engaged. In many cases a worker is employed by more than one person, each family claiming only a few hours of his or her services. They are generally paid monthly in cash and sometimes both in cash and kind.

The number of domestic servants increased from 12,963 in 1921 to 16,861 in 1961 but has tended to decline in recent years.

Barbers

In olden days, barbers used to go from house to house to their clients for shaving and hairdressing but now this practice has almost disappeared and a large number of barber shops in the urban and the rural areas have been opened. In the town the barber shops are well furnished and are run by more than one worker. Usually the owner is assisted by other paid employees. On Sundays these shops have a heavy rush and customers have to wait for their turn.

Certain barbers, who can not afford a saloon are seen attending to their costumeta on the roadside with only a piece of matting or brick for their clients to sit on.

At Har-ki-Pauri in Hardwar, a long row of barbers can be seen on the bank of the Ganga. They, besides attending to their routine clients also attend to Hindu families who go there for *mundan* ceremony of their children.

Barbers, besides following their main profession of hairdressing, also used to serve on ceremonial occasions, like births, marriages and deaths, they were generally assisted by their women-folk who performed similar duties inside the house among the women-folk. Each family had a fixed barber. They also served as go-betweens in match-making. Such personal services are fast disappearing now.

In Saharanpur district, in 1921, there were 5,544 barbers and wig-makers (including 414 women). The number of barbers and related worker went down to 5,500 (including 7 women) in 1961.

Washermen

The modern washerman is now different from what his counterpart was a few decades ago. Today washermen are an organised community and have their own organisations in certain parts of the district.

Formerly, the washermen/washerwomen collected clothes from certain families over which they had a monopoly. The practice is now fast dying out. There are only a few washermen in the city who still go from house to house to collect clothes for washing. The laundries and dry cleaning establishments have fast replaced the family washermen, due to their punctuality and better work due to introduction of machines. These establishments provide employment to the washermen. In rural areas there are very few laundries and the old system is still in vogue. In 1921, there were 3,826 washermen (including dyers), but their number increased to 3,930 in 1961.

Tailors

Tailors are found mostly in the urban areas and are to be seen preparing garments of different types both for men and women. In Saharanpur, Roorkee and Hardwar there are a large number of big tailoring establishments and the owners of such firms employ a number of tailors. But most of the tailors work on their own and their charges are comparatively moderate. Such tailors are spread all over the towns and other parts of the district, the big establishments being confined to the main markets. In the rural areas the independent tailor with his own sewing machine is found even today, although an increase in the size of his establishment is quite noticeable now.

Tailoring units are classed as 'ladies' and 'gents' but they generally do both types of work. In 1921, there were 3,224 tailors, darners, embroiderers etc., in the district. The number increased to 7,339 in 1961.

Malis (Gardeners)

The total number of gardeners including those working on farms in 1961 was 1,934 of whom 674 served in the urban areas. Apart from those who were engaged in government or public gardens, quite a few *malis* worked, generally part-time, in the smaller gardens maintained by the more affluent citizens.

They also went from house to house delivering flowers daily to the Hindu families for their *puja* (worship). Their services were also called upon in diseases like smallpox, chickenpox, mumps and jaundice where chanting of *mantras* was believed to provide relief. Both these practices are now dying out. Flowers are now sold on shops usually found clustering the places of worship or nearby pavements. Reliance on modern medicines has replaced the belief in the efficacy of the chanting of *mantras*.

OTHER OCCUPATIONS

Among those who pursued certain other occupations in the district in 1961, there were 5,823 hawkers, pedlars and street vendors, 5,804 carpenters and pattern makers (wood), 4,095 potters and clay formers, 4,136 tool makers machinists, plumbers, welders, platers and related workers, 3,072 priests, preceptors, fakirs and monks, 2,605 blacksmiths, hammersmiths and forgers, 2,499 salesmen and shop assistants, 2,291 *khandsari*, sugar and jaggery makers, 1,853 stone cutters, stone carvers and stone dressers, 1,438 jewellers, goldsmiths and silversmiths, 1,282 animal drawn vehicle drivers, 1,228 bakers, confectioners, candy and sweetmeat makers, 1,109 basket weavers, 1,105 furnacemen, kilnmen and ovenmen, 956 loggers and other forestry workers, 747 bricklayers, plasterers and masons, 110 photographers and allied workers, 168 fishermen and related workers, 109 money-lenders and 102 well drillers.

CHAPTER IX

ECONOMIC TRENDS

LIVELIHOOD PATTERN

At the census of 1901 the proportion of the population of district Saharanpur depending on agriculture was found to be 47.6 per cent and remained almost the same (43.7 per cent) in 1911, but increased to 52.6 per cent in 1921. By 1951, however, the percentage had again dropped to 48 although, the actual number of persons had increased to 6,50,447 from 4,93,264 in 1921, a rise of 31.9 per cent. In the same year the relevant percentage for the State was 74.2.

In 1921 the percentage of workers in the total population was 47.6 (agricultural 22.6 per cent, non-agricultural 25.0 per cent) but by 1951 it had come down to 34.8 (agricultural 16.7 per cent, non-agricultural 18.1 per cent).

The censuses that followed after 1951 pooled all the dependents of all the divisions of economic activity into one class defined as non-workers. Consequently the data after 1951 does not help to indicate the degree of dependence existing in various economic activities in which workers were engaged.

The 1961 census adopted a different economic classification and definition of worker. Hence an exact comparison with earlier data is not possible. However, the data of 1951 census when interpreted in terms of the definitions introduced in 1961 and adhered to in 1971, gives the following comparative position :

Year	Total number of workers	Agricultural workers			Percentage to total population of total workers
		Percentage to total workers			
		Cultivators	Labourers	Total	
1951	4,40,291	38.5	11.4	49.9	32.5
1961	5,46,910	36.1	9.0	45.1	33.9
1971	6,12,261	36.0	26.9	62.9	29.8

A very clear comparison is not possible because in the 1961 census a person was categorised as 'worker' even though his contribution was marginal—as little as one hour's work in a day—irrespective of his main activity, while the 1971 census more strictly defined 'worker' as a person whose main activity was participation in my economically productive work by his physical or mental activity.

It is noticeable that employment opportunities have not kept pace with the increase in population.

Workers, have now been classified into nine major divisions, the basis of the classification being those economic activities which were akin in terms of process adopted, the raw material used and the finished products produced.

The following statement shows the nine divisions and number of persons engaged in 1971 :

Economic division No. Name	Males	Females	Total	Percentage to total workers	Percentage to total population
I Cultivators	2,18,172	2,590	2,20,762	36.0	10.8
II Agricultural labourers	1,60,439	4,159	1,64,598	26.9	8.0
III Live-stock, forestry, fishing, hunting, plantations, orchards and allied activities	5,443	324	5,767	0.9	0.3
IV Mining and quarrying	103	8	111	0.0	0.0
V (a) Household industry	25,346	1,439	26,785	4.4	1.3
V (b) Other than household industry	37,876	737	38,613	6.3	1.9
VI Construction	8,237	129	8,366	1.4	0.4
VII Trade and Commerce	38,093	384	38,477	6.3	1.9
VIII Transport, storage and communications	20,990	191	21,181	3.5	1.0
Other services	82,808	4,793	87,601	14.3	4.2
Total workers	5,97,507	14,754	6,12,261	100.0	29.8
Non-workers	5,30,978	9,11,595	14,42,573	—	70.2
Total population	11,28,485	9,26,349	20,54,834	—	100.0

All the non-workers in the 1971 census (as in 1961) have been grouped together in one single class although they have been categorised as follows ;

- (a) Full time students
- (b) Those attending to household duties
- (c) Dependents and infants
- (d) Retired persons and rentiers
- (e) Persons of independent means
- (f) Beggars and vagrants
- (g) Inmates of penal, mental and charitable institutions
- (h) Others

GENERAL LEVEL OF PRICES AND WAGES

Prices

At the beginning of the nineteenth century the rates of the food-grains were extremely low, according to modern standards, and food-grain was cheaper in Saharanpur than in Meerut where, in 1806, wheat was sold at 50 seers, gram at 70 seers, barley at 80 seers, *bajra* at 60 seers and maize at 100 seers, to the rupee. In spite of great fluctuations, the prices remained low for half a century, though at the same time there was a constant and perceptible tendency to rise.

The famine of 1837 had a great effect on the markets, and though it was followed by a recovery, this recovery was not complete. From 1840 to 1850 the average rates were at least 25 per cent higher than those of thirty years before, cheap as they were in comparison with those that followed. The struggle of 1857 had, no doubt, a very disturbing effect on trade and this turmoil had hardly passed away when a series of disastrous seasons took place, and prices rose to a height that was regarded as quite abnormal. It was probably on this account that the average rates for food-grains for the five years ending in 1865 reached a much higher level than was the case in other and more favoured parts of the State. The period was one of agricultural depression arising from climatic conditions, and consequently cannot be considered as normal. Nor did the effects of famine soon pass away, for in 1869 another exceptionally bad season was experienced, which sent prices to a height rarely, if ever, surpassed in the previous history of the district. Between 1861 and 1870 the average rates for the principal food-grains were 14.4 seers for common rice, 20.52 seers for wheat, 26.6 seers for barley, 21.97 seers for jowar, 23.26 seers for *bajra* and 24.94 seers to a rupee for gram. During the next decade markets slackened, but the second half

was marred by the famine of 1877, when the extreme scarcity prevailing elsewhere was not without its effect on Saharanpur, already sensitised by the development of communications. The rates for the ten years, however, were still in several instances lower than in the preceding period : rice averaged 11.92 seers, wheat 20.6, barley 29.5, jowar 24.3, *bajra* 21.86, and gram 24.15 seers to the rupee. When the effects of famine had passed away a period of cheapness again ensued and prices receded more or less to their old level from 1880 to 1885. The next year, however, witnessed a striking change (and the same phenomenon was observed every where). It was not ascribed in any way to poor harvest, for the crops were uniformly good. The change, which was quite general, was due to far reaching economic causes, such as the fall in the value of silver, the extension of railways and the sudden expansion of the export trade, all of which appear to have synchronised in their action. The rates rose to a height that had not been surpassed in former periods which included a year of famine. Consequently, for the ten years from 1881 to 1890, the average for rice was 12.3 seers, for wheat 18.9, for barley 26.7, for jowar 24.46, for *bajra* 22.65 and for gram 24.41 seers to the rupee.

These high rates showed no signs of diminishing in the years that followed; they remained steady at first and then rose sharply as a succession of poor harvests ensued, culminating in the famine of 1897, the effects of which were almost insignificant in Saharanpur, but prices were kept up by the drought of 1899, of which the influence was very strong though comparatively local. The rates from 1891 to 1900 averaged 9.78 seers of rice, 14.68 of wheat, 21.82 of barley, 17.84 of jowar, 15.49 of *bajra* and 18.29 of gram. During the next five years the out turn of the harvests was the best on record and the stringency abated. This was the case throughout the State, and Saharanpur afforded a striking example. Rice alone had become dearer, averaging 9.62 seers, but wheat could be purchased at 15.8 seers for a rupee, barley 24.09 seers, jowar 21.0 seers, *bajra* 19.91 seers and gram 20.18 seers. It appeared that between 1861 and 1905 prices rose on an average by 46 per cent, the increase being 33 per cent since 1871, the greater part of the enhancement occurred in the last two decades.

With the outbreak of the First World War in 1914, a steady but gradual rise in the prices was recorded in the succeeding years. The price level was higher by 26 per cent in 1916 and 55 per cent in 1928 over the rates prevailing in 1911, viz., wheat 12.0 seers, common rice 7.44 seers, gram 14.62 seers and *arhar* dal 10 seers per rupee. From 1930 onwards, the prices again began to rule easy owing to the world-wide economic depression.

The price level went down in 1934 by about 47 per cent, 34 per cent and 17 per cent as compared to those of 1928, 1916 and 1911 respectively. The depression lasted till 1936. Thereafter the prices began to recover.

By 1939, they had registered a rise of nearly 33 per cent over those prevalent in 1934.

The prices continued to show an upward trend owing to the outbreak of the Second World War in 1939. The rise was, no doubt, largely due to intense activity of the speculators, but other factors like the holding back of stocks in anticipation of future shortage, contributed in no small measure to maintain and even to advance the high level reached. Action under the Defence of India Rules was taken by the government in 1940 to prevent a further rise. The prices were fixed (though modified from time to time) by the district officer, and prosecution launched for profiteering and dealers in food-grains were licensed. Even then the prices continued to go up. In order to arrest further rise in prices and at least to stabilize them, district reserves were maintained and to ease the situation a partial rationing scheme was introduced in 1943 but the markets were allowed to function normally to avoid the possibility of a breakdown in supplies. The availability of certain food-grains at subsidized rates from the government shops induced the dealers to reduce their own prices and bring out their hoarded stocks.

It was expected that with the end of the war and enforcement of several price control measures by the government, the general food situation would ease, but it did not. The price level in 1944 was higher by 271 per cent than that of 1911 and by about 236 per cent than that of 1939. The period between 1943 and July, 1952, was that of rationing and controls. After this period markets were allowed to function normally and restrictions on movements of food-grains were also withdrawn and the statutory maximum prices, prescribed for various food-grains, were also given up. The system of issuing food-grains to ration card holders from ration shops was, however, continued in order to arrest any rising trend.

By the end of 1953, prices tended to come down. The withdrawal of all its financial resources by the government from the agricultural market had the effect of softening prices which once again began to be adjusted by the normal forces of demand and supply. The cultivator was not sure of getting a minimum price for his grain, nor was the trader assured of earning a commission on grain supplied by him. The nervousness of the cultivator and the trader led to a further decline in prices. In consequence, the downward trend which had started in 1953 could not be arrested and by 1955 prices had fallen by about 54 per cent for rice, 28 per cent for wheat and 32 per cent for gram, as compared with those prevailing in 1950. In order to arrest a further fall in prices so as to avoid hardship to farmers, the government had to take measures in 1953-54 to support prices. Prices, thereafter, again showed a gradual upward trend. The available average monthly urban retail prices for certain years from 1950 are given below :

Year	Prices (in Rs per kg.)		
	Wheat	Gram	Rice
1950	0.43	0.31	0.95
1955	0.31	0.21	0.43
1960	0.49	0.42	0.57
1965	0.89	0.82	1.00

The average yearly retail prices from 1966 to 1973 were as follows :

Year	Prices (in Rs per kg.)		
	Wheat	Gram	Rice (common)
1966	0.84	0.80	1.26
1967	1.34	1.39	1.55
1968	0.91	0.94	1.20
1969	0.91	1.00	1.13
1970	0.90	1.00	1.12
1971	0.84	0.96	1.03
1972	0.95	1.25	1.35
1973	1.15	1.90	1.45

The average retail prices of certain other essential commodities, obtaining in Saharanpur town in 1971 and 1973 are given below :

Commodity	Price (in Rs per kg.)	
	1971	1973
Dal arhar	1.81	2.50
Ghee	14.04	20.00
Jaggery	1.09	1.50
Firewood	0.13	0.16
Mustard oil	5.31	8.00
Sugar	1.88	3.90

Wages

About the middle of the nineteenth century the traditional cash wage of an agricultural labourer was two annas a day or Rs 3.75 per month, and this remained fairly constant till 1878 or thereabout, when it rose to Rs 4.0. A further increase took place with the general rise in prices that started in 1886, and the wages rose to between Rs 5 and Rs 6, the increase in almost every branch of labour being about 50 per cent during the past twenty years. In 1906 the cash wages for unskilled labour ranged from Rs 4.69 to Rs 5.62 per month. These rates were those paid by ordinary cultivators to free labourers. Landholders and persons of influence generally paid lower wages, as a rule about Re 0.06 a day less. In the urban areas the cash wages were universal, unskilled labour was a little dearer than in the rural tracts, while the wages earned by artisans were distinctly higher. A carpenter earned from Rs 5 to 6 per month in the villages and from Rs 8 to 10 in the towns and earned even double the latter amount if he had attained proficiency as a wood-carver or fret-worker.

A comparative survey of rural wages for skilled and unskilled labour for certain years from 1906 to 1971 is given in the following statement :

Year	Wages (in Rs per day)	
	Unskilled labour	Skilled labour
1906	0.16	0.34
1911	0.17	0.48
1916	0.22	0.56
1928	0.31	1.00
1934	0.19	0.62
1939	0.21	0.52
1944	1.06	1.75
1950	1.62	2.00
1955	1.25	3.00
1960	1.00	3.00
1965	1.75	—
1970	3.25	7.75
1971	3.37	7.75

After the First World War, there occurred a marked all-round rise in wages which was most marked in 1928. The fall after 1930, which was due to world-wide economic depression, was reflected in the wages

obtaining in 1934, after this wages began to rise and by 1944 those for unskilled and skilled labour had recorded a rise of 389 and 240 per cent respectively over those of 1939. This abnormal rise may be attributed to the outbreak of the Second World War in 1939 and the consequent rise in prices. Wages thereafter did not come down and continued to move upward. In 1971 wages for various occupations, such as weeding, reaping, transplantation and ploughing ranged from Rs 3.0 to 4.0 per day, the working hours being eight.

Wages in urban areas were, as usual, slightly higher than those in rural areas. Wages prevailing in Saharanpur town in 1971 are given below in respect of certain occupations :

Occupation	Unit of quotation	Wages (in Rs)
Gardener	(a) Per month (whole-time)	110.00
	(b) Per month (part-time)	30.00
Chowkidar	Per month	60.00
Wood-cutter	Per maund (37.3 kg.) of wood turned into fuel	0.50
Herdsmen	(a) Per cow (per month)	4.00
	(b) Per buffalo (per month)	5.00
Porter	Per maund (37.3 kg.) of load carried for a mile (1.6 km.)	0.50
Casual labourer	Per day	4.50
Domestic servant	(a) Per month without food	80.00
	(b) Per month with food	50.00
Carpenter	Per day	12.00
Blacksmith	Per day	12.00
Tailor	(a) Per cotton shirt (full sleeves) for men	2.00
	(b) Per cotton shirt (short sleeves) for women	1.25
	(c) Per woollen suit	35.00
	(d) Per cotton suit	15.00
Midwife	(a) For delivery of a boy	25.00
	(b) For delivery of a girl	20.00
Barber	(a) Per shave	0.25
	(b) Per hair-cut	0.50
Motor driver	Per month	250.00
Truck driver	Per month	300.00
Scavenger	For a house with one latrine for one cleaning per day	2.00

GENERAL LEVEL OF EMPLOYMENT

According to the census of 1961 there were 2,46,901 cultivators and agricultural labourers in the district. The number of persons engaged in activities connected with live-stock, forestry, fishing and hunting was 15,682. As many as 9 persons were employed in mining and quarrying, 5,951 persons were engaged in activities connected with building of roads, bridges, tunnels, etc., and 14,088 persons in providing electricity, water, gas and sanitation. Trade and commerce offered employment to 33,987 persons and transport, storage and communications to 15,336. The services engaged 1,41,242 persons, of whom 18,442 were in government and quasi-government services, 7,417 in educational and scientific services, 2,775 in medical and health services, 3,474 in the religious and welfare services, 577 in legal services, 14,314 in personal or domestic services and the remaining in other services. The various manufacturing projects employed 71,068 persons, of which 11,516 were engaged in the processing of food-grains, 8,647 in the manufacture of wooden articles, 5,719 in the products of non-metallic minerals other than petroleum and coal, 6,228 in that of metallic goods including machinery and transport equipment, 3,702 in leather and its products, 2,185 in paper and its products, 25,324 in that of cotton, jute, woollen, silk and miscellaneous textiles and the remaining in other services.

Employer, Employees and Workers

According to the census of 1961 the numbers of employers, employees, single workers and family workers (those who work in their own family without wages) in the non-household industries and of employees and others in the household industries are given in the statements that follow :

NON-HOUSEHOLD INDUSTRIES

Type of worker		Urban	Rural	Total
Employer	Male	6,010	2,224	8,234
	Female	243	65	308
Employee	Male	52,793	27,224	80,017
	Female	2,708	1,249	3,957
Single worker	Male	38,698	1,05,560	1,44,258
	Female	1,079	7,195	8,274
Family worker	Male	3,588	3,637	7,225
	Female	68	905	973
Total	Male	1,01,089	1,38,645	2,39,734
	Female	4,098	9,414	13,512

HOUSEHOLD INDUSTRY

Type of worker		Urban	Rural	Total
Employee s	Male	100	1,147	1,247
	Female	81	39	120
Others	Male	4,493	29,718	34,211
	Female	2,705	8,480	11,185
Total	Male	4,593	30,865	35,458
	Female	2,786	8,519	11,305

Employment Trends

The following statement shows employment trends in both the private and the public sectors in the district during the years 1966-70. The data relate only to those establishments which responded to the enquiry conducted by the employment exchange authorities :

Year	No. of establishments			No. of employees		
	Private sector	Public sector	Total	Private sector	Public sector	Total
1966	290	140	430	23,083	28,949	52,032
1967	259	144	399	20,498	29,784	50,282
1968	278	145	423	20,883	32,644	53,527
1969	282	195	477	20,984	35,962	56,946
1970	275	197	472	20,325	37,534	57,859

The number of persons employed in 1969 and 1970 given in the foregoing statement, when further split up according to the nature of their work presents, the following picture :

Nature of activity	No. of reporting establishments		No. of employees					
	1969	1970	1969			1970		
			Private sector	Public sector	Total	Private sector	Public sector	Total
Agriculture, live-stock and fishing	3	4	—	593	593	—	461	461
Manufacturing	118	119	14,238	8,986	23,224	14,017	9,732	23,749
Construction	10	10	44	2,404	2,448	25	2,113	2,138
Electricity, gas, water & sanitary services	10	10	236	1,422	1,658	280	1,551	1,831
Trade and commerce	42	44	205	733	938	223	788	1,011
Transport and storage	20	19	739	2,047	2,786	210	2,258	2,468
Services (public, legal, medical, etc.)	263	266	5,522	19,777	25,299	5,570	20,631	26,201
Total	466	472	20,984	35,962	56,946	20,325	37,534	57,859

Employment of Women

The trend in employment of women workers is given in the following statement which shows the number of women employed in the private and public sectors during the year ending December, 1970 :

No. of reporting establishments	472
No. of women employees in public sector	2,100
No. of women employees in private sector	1,051
Total number of women employees	3,151
Percentage of women employees to total number of employees in private sector	5.47
Percentage of women employees to total number of employees in public sector	5.59

The proportion of women workers in different spheres in the quarter ending December, 1970, was as follows ;

Sphere	Percentage
Education	60.95
Medical and public health	21.73
Manufacturing	1.26
Transport	0.52
Trade and commerce	0.58
Construction	0.90
Others	14.06

Unemployment Trends

The number of men and women who sought employment in different spheres during the year ending December, 1970, are as follows :

Educational standard	Men	Women	Total
Post-graduate	32	16	48
Graduate	692	68	760
Intermediate	1,543	125	1,668
Matriculate	2,578	191	2,769
Below matriculate	5	19	24
Illiterate	969	126	1,095
Total	5,819	545	6,364

Vacancies notified to the employment exchange during the quarter ending December, 1970, by the Central Government were 24, by the State government 374, quasi-government 11, local bodies 97, and private sector 122.

The district experienced shortage of nurses, stenographers, compounders, librarians and Urdu teachers while unskilled labourers and persons without previous experience and technical training were surplus to requirement.

Employment Exchange

An employment exchange was established in this district in 1949 to cater to the rehabilitation needs of demobilized army personnel after the Second World War and later on to the rehabilitation of refugees. In 1952 its scope was extended to all employment seekers. Its administration was

taken over by the State government in 1956. The following figures would show the amount of assistance rendered by the employment exchange during the years 1966—70 :

Year	Vacancies notified by employers	No. of persons registered for employment	No. on 'live register'	Persons provided with employment
1966	2,119	17,443	5,422	1,366
1967	2,830	14,309	5,146	1,208
1968	2,738	16,566	6,536	1,322
1969	2,595	17,059	6,715	1,342
1970	2,562	22,378	11,051	1,702

The exchange introduced the employment market information scheme in December, 1960, to find out, quarterly, from public and private sector establishments employing five or more persons, the number of persons employed by them and the number of posts under them that fell vacant during the quarter and the type of jobs for which the supply of qualified candidates was inadequate. The vocational guidance and employment programme is also being carried on by the exchange since 1964, to provide vocational guidance and employment counselling to boys and girls in groups as well as individually and to assist them in placement. In 1970, as many as 1,886 candidates participated in group discussions and 1,092 individuals sought guidance.

Town employment exchanges at Roorkee and Hardwar were also opened, in 1967 and 1968 respectively, to assist the employers as well as employment seekers. The Roorkee exchange covers Bhagwanpur and Roorkee blocks, while Hardwar has Bahadurabad and Laksar blocks, within its area of work. The rest of the area is still covered by the district employment exchange, Saharanpur. Recruitment to public services through the exchange has now become compulsory.

NATIONAL PLANNING AND COMMUNITY DEVELOPMENT

Under British rule, the question of national planning and rural development received little attention and whatever efforts were made in this direction were merely the outcome of political expediency and confined to such activities as sanitation and expansion of agricultural and irrigation facilities to the villages. When the first Congress government came into office in 1937, a scheme for rural development was adopted in certain villages of the district. The scope of the scheme was expanded and a rural development association was formed at the district level. The functions of the association were more

or less advisory, it had a nominated non-official chairman and a subdivisional magistrate as secretary. The work related largely to rural hygiene, construction of roads, establishment of libraries, construction of panchayat *ghars* and night schools for adults, and allied developmental activities. With the Congress government going out of office in 1939 the rural development scheme also went almost into cold storage till May, 1947, when the rural development department was merged with the co-operative department and the rural development association replaced by the district development association with a non-official as chairman and the district co-operative officer as its secretary.

The first genuine and planned effort to improve the conditions of the people in the rural areas came in the wake of the setting up of the Planning Commission of India in 1950 after which development activities received proper attention. In the First Five-year Plan (1951—56) agriculture, including irrigation and power, were given top priority, funds being allocated accordingly. Under the State Department for planning and development, in 1952, the district development association was replaced by the district planning committee having the district magistrate as its chairman and the district planning officer as its secretary and a number of subcommittees for the preparation and execution of programmes. Its role was, however, advisory.

In Saharanpur district the first community development block was opened on October 2, 1953, at Deoband followed by another at Muzaffarabad on October 2, of the next year.

The scope of the Second Five-year Plan was enlarged to include industrialisation and it was decided that the whole district would be divided into development blocks for the implementation of the various Plan schemes. In the second half of the Second Five-year Plan the Antarim Zila Parishad (now the Zila Parishad) was formed in 1958 by amalgamating the district planning committee and the district board. A three tier structure of rural self-governing bodies was adopted from December, 1963 for the successful implementation of the planning and development programmes—the village panchayat at village level, the Kshettra Samiti at block level and the Zila Parishad at the district level. For the co-ordinated execution of the different Plan schemes the resources of the agriculture, co-operative, animal husbandry, Panchayat Raj and some other departments and organisations were pooled and put under the control of the district planning officer. The district was divided into 16 development blocks which were reduced in 1967 to only 12 due to reorganisation, Sarsawa, Purwarka, Nanauta and Narsar being abolished. These blocks were revived in October, 1972. Some particulars about these 16 blocks of the district are given below :

Tahsil	Name of block	Date of inauguration	Number of		Population
			Gaon Sabhas	Nyaya pancha yats	
Deoband	Deoband	2-10-56	67	9	1,03,575
„	Nagal	2-10-56	77	9	76,005
„	Rampur	2-10-56	66	7	70,869
„	Nanauta	2-10-58	55	6	63,722
Nakur	Gangoh	2-10-55	102	10	1,07,941
„	Nakur	1- 4-58	84	10	76,784
„	Sarsawa	2-10-59	96	12	87,106
Roorkee	Bahadurabad	1-4-57	60	8	1,30,062
„	Laksar	2-10-54	71	9	77,001
„	Roorkee	2-10-59	68	9	1,39,643
„	Bhagwanpur	2-10-62	62	9	72,985
„	Narain	2-10-59	59	7	87,991
Saharanpur	Balia Kheri	1-4-61	88	10	90,590
„	Muzaffarabad	2-10-54	130	19	61,386
„	Sadhollkadim	1-10-62	82	12	50,571
„	Purwarka	1-4-59	104	12	2,59,960

Note : Nanauta is in Stage II and the rest in Post-stage II

During the First Five-year Plan period the stress was on peoples' participation in different activities. Improvement of village roads, drainage and pavements was done by *shramdan* (voluntary labour). Improved methods of agriculture and use of compost manure were also introduced.

Tube-wells and other facilities for irrigation were augmented, sugar-cane development societies were formed. The aim of Second Plan was to increase national income by 25 per cent and to reduce unemployment. During this period district branches of sale-purchase co-operative societies were established at Gangoh, Rampur, Saharanpur, Manglaur and Deoband to enable the farmers to get proper value of their produce and a land development bank also started functioning to make available to farmers loans on easy terms for purchase of manure, seeds, agricultural implements, etc. A pilot project in the field of cottage industries, to open more avenues of employment and to provide raw material and better facilities for purchase and sale, was also started at Deoband. In the field of agricultural schemes relating to soil conservation, Japanese method of paddy cultivation, expansion of and training in the use of improved agricultural implements and chemical and green manures were taken up.

The Third Five-year Plan was conceived as "the first stage of a decade or more of intensive development leading to a self-reliant and self-generating economy." It sought to ensure a minimum level of living to every family while narrowing economic and social disparities. Some special programmes, such as intensive methods of wheat and paddy cultivation, crop protection measures, availability of improved varieties of seeds, increase in double-cropped area were taken in hand. This all resulted in 33 per cent increase in production. A special scheme for the development of live-stock and poultry and measures for development of fisheries were undertaken.

A period of three Annual Plans intervened between the Third Plan and the Fourth Plan which commenced from April 1, 1969, its broad objectives being the following :

- (1) a growth rate of 5 per cent in the agricultural sector and 8-10 per cent in industry
- (2) 6.9 per cent annual rate of growth in production of food-grains to achieve self-sufficiency
- (3) To maximise employment opportunities with the proposed growth rate
- (4) To redress imbalances arising from a high rate of population growth and inadequate expansion in agricultural production by bringing, in shortest possible time, the fertility rate to 25 per thousand

The main achievements made by 1972 are increase in food production by sixty per cent, establishment of about 200 small industrial units in the district, besides increased facilities for education, transport and health services, special emphasis on the improvement of conditions of the backward classes and grant of subsidies to them for starting small crafts.

The implementation of these plan schemes has helped in raising the standard of living; providing better wages and living conditions all-round and helping the general economic growth of the district. The growing industrialisation side by side with increased agricultural production holds a definite promise of ushering in an era of increased prosperity and better economic conditions for the people of the district.

CHAPTER X

GENERAL ADMINISTRATION

Subsequent to the conquest of the upper doab by the British in October, 1803, it was proposed that this area be divided into four divisions of which the first comprised 53 parganas now included in the districts of Saharanpur, Muzaffarnagar and Meerut.

This division was further directed to be split up into two portions; the northern division including the existing district of Saharanpur and about half of Muzaffarnagar. It was entrusted to the charge of the British Resident at Delhi, while the remainder was attached to Moradabad. However, this was more in the nature of a temporary arrangement, and in August, 1804, the northern division was replaced by the formation of a separate district. The headquarters of this newly constituted unit was set up at Saharanpur, being placed under the charge of J. D. Guthrie, its first British collector. A number of summary Settlements of land and revenue followed in succession.

The creation of a sub-collectorship in 1824 with revenue jurisdiction over 14 parganas at Muzaffarnagar, and conversion of this tract into a regular district in 1826, reduced the number of parganas in Saharanpur district to twenty-five. Many changes in the number, name, area and extent of these parganas have since taken place, the first great re-organization taking place in 1842 at the time of the first regular Settlement.

The district of Saharanpur today forms one of the five districts of Meerut Division, which is under the charge of a commissioner with headquarters at Meerut. The post of commissioner was created in 1829, being initially designated as commissioner of revenue and circuit. He enjoyed complete authority within his jurisdiction on all matters. The creation of numerous departments at regional level resulted in the transfer of such functions as related to industries, co-operative societies, labour, sales tax, etc., to other regional officers who came into existence since independence. However, the commissioner continues to function as a vital link between the districts under him and government. Invariably backed by a substantial amount of administrative experience, he supervises the administration as well as planning and development activities in his Division.

On the appellate side, his jurisdiction extends to hearing appeals and revisions under the U. P. Zamindari Abolition and Land Reforms Act and other allied enactments, the Arms Act and the Anti Goonda Act, etc. He is assisted by two or three additional commissioners for the disposal of revenue appellate work. He is the

chairman of the regional transport authority and has extensive authority over Zila Parishads, municipal boards, notified areas and town area committees. The district magistrate addresses the government on all important matters through his agency and keeps him informed on important issues.

Subdivisions

For purposes of administration of land revenue and law and order, this district has been divided into four subdivisions each forming a tahsil of the same name. These are Saharanpur, Nakur, Deoband and Roorkee.

District Staff

The head of the civil administration in the district is the district officer who is designated as collector and district magistrate. His office has occupied a key position in the administrative set-up since the British rule.

An important legacy of the British rule in India was the propounding of the ideal pertaining to the role of a district officer. The principle behind this idea was rather well explained by Warren Hastings, who, opined that the British East India Company would be remembered by the virtue and not the ability of its officers.¹ The institution thus founded, was best expressed in terms of the system improvised by the British for district administration in India.

The guide lines of this structure, which developed in the course of time, resulted in establishing the status of the district officer as a guardian of public interest in his district, the executive and the judicial functions (with the exception of capital punishment) inevitably blending into his duties. In 1861, the magistrate-collector, as he was then known, ceded some of his powers to the superintendent of police, making the latter responsible for the maintenance, supervision and discipline of the police force, and henceforth assumed the status of a director in matters of general policy in the district.

The system on the whole worked well in accordance with the fundamental principles underlining its structure throughout the duration of the British empire in India.

The advent of Indian independence necessitated some changes in this system. Though the district magistrate is still the highest executive authority and the pivot of the entire general administrative machinery in the district, he is simultaneously required to make maximum efforts for public welfare. He is assisted by the magistracy and the police in the maintenance of law and order, and execution of the policies laid down by the government. In his capacity as district magistrate, and head of the criminal administration

¹ Woodruff Philip : *The Men Who Ruled India; The Guardians*. pp. 360-361

he supervises law and order in the district. The transfer or posting of police station officers can not be made without his approval. He has the power to inspect police-stations and to direct his subdivisional magistrates to do so. The entire magisterial and police administration is integrated under his authority to combat riots or disturbances. He is also responsible for collection of land revenue and other governmental dues recoverable as arrears of land revenue, for maintenance of the land records of the district, and for extending assistance to the public during natural calamities such as droughts and floods. The district treasury is also in his ultimate charge.

In his capacity as head of the district administration he also functioned formerly as a co-ordinator, normally not interfering with the internal administration of the various development departments functioning in the district, each department enjoying a certain degree of autonomy, its district level officer managing the affairs subject to the control and direction of his superiors at the State or regional level. The administrative reorganisation of the development projects in the post-Independence period in the wake of the formulation of the Five-year Plans provided for a unified direction and control at all administrative levels. Consequently, all the departments engaged in development work, e. g., agriculture, animal husbandry, co-operatives, panchayats, minor irrigation, information, etc., were brought under the administrative control and over-all direction of the district officer who is assisted by an additional district magistrate or district planning officer at the district level and block development officers at the block level.

In his capacity as ex-officio district election officer, he organises elections to the Lok Sabha (House of People) and State Legislative Assembly when due.

The district officer also heads the department of civil supplies in the district and ensures equitable distribution of food-grains and other essential commodities through fair price shops with the help of the district supply officer, who also functions as the district rent control and eviction officer. He is also ex-officio president of the district, soldiers', sailors' and airmen's board, which looks after the welfare of the ex-servicemen as well as the families of serving soldiers of the district.

In his capacity as controller of civil defence, the district officer has to execute, co-ordinate and control operations of all civil defence measures of the district level to be implemented and enforced in accordance with specific directions from the director of civil defence. He is assisted by a skeleton whole-time staff consisting of a deputy controller, a civil defence officer, and an officer-in-charge, civil defence division (each division covering one lakh population), and other ancillary staff.

A number of deputy collectors performing various duties concerning revenue and criminal administration and also assisting development work

within their subdivisions, act in subordination to the district magistrate. Those incharge of the four subdivisions of the district are designated sub-divisional magistrates. Their duties are largely similar to those of the district officer, being confined, however, only to their subdivisions. Their case work is a mixed bag of revenue and prohibitory and preventive sections of the Cr. P. C. (e. g., 107, 144 and 145). They also conduct identification proceedings, record dying declarations, and function as first class executive magistrates and first class assistant collectors in charge of their subdivisions.

Each of the four tahsils is under the charge of a tahsildar, the headquarters of these officers being located in the tahsils at Saharanpur, Roorkee, Nakur and Deoband. Each tahsil has a subtreasury under the direct charge of the tahsildar.

The police administration in the district is headed by the superintendent of police who is assisted by one assistant superintendent and four deputy superintendents. The police staff in addition to the above, is comprised of two inspectors and 69 subinspectors for the 18 police-stations of the district.

The judiciary is headed by the district and sessions judge who is also the appointing, controlling and disbursing authority for the establishment of Saharanpur judgship. He is the highest authority for administration of justice in civil and criminal matters within the district. All the judicial magistrates posted to the district work under his supervision and control on behalf of the High Court. Criminal appeals filed against judgements of criminal courts and revisions and appeals against the decisions of the civil judge and *munsifs* are heard by him. He also functions as the district registrar. He is assisted by five sub-registrars having offices at Saharanpur, Roorkee, Deoband, Nakur and Hardwar. The latter's function relates to registration of documents relating to movable and immovable property of right, title and interest of people.

Other District Level Officers

The designations of other district level officers of the State government in the district, working under the administrative control of their departmental heads and having their headquarters in the Saharanpur city are the :

Assistant Registrar,
(Co-operative Societies)
Chief Medical Officer
District Agriculture Officer
Basic Shiksha Adhikari
District Statistics Officer
District Industries Officer
District Employment Officer

Executive Engineer, L. S. G. E. D
Executive Engineer, P. W. D.
Executive Engineer, Eastern Yamuna
Canal
Executive Engineer, Ganga Canal

Bhoomi Sanrakshan Adhikari

District Supply Officer	Executive Engineer, Drainage Division
District Information Officer	Executive Engineer, Hydel
District Inspector of Schools	Executive Engineer, Tube-wells
Deputy Director of Industries	Executive Engineer, Electricity Board
District Panchayat Raj Officer	Superintendent, Government Litho
District Staff Officer, Home Guards	Printing Press, Roorkee
District Harijan and Social Welfare Officer	Superintendent Government Gardens
	Treasury Officer

CENTRAL GOVERNMENT OFFICES

Indian Posts and Telegraphs Department—The district of Saharanpur forms the headquarters of the Saharanpur postal division under the charge of a senior superintendent of post-offices who resides at the district headquarters. The senior superintendent is assisted by an assistant superintendent, attached to the divisional headquarters and five inspectors of post-offices stationed at Saharanpur, Roorkee and Muzaffarnagar.

The district also has an Institute located at the headquarters for training personnel in various branches of postal and telegraphic communication. It is headed by a principal, assisted by a vice-principal and an administrative officer.

Directorate of National Savings—Saharanpur is under the jurisdiction of the assistant regional director, National Savings, with headquarters at Meerut. At the district level, the additional district magistrate (planning) supervises the working of this scheme on behalf of the district magistrate. Two organisers posted at Saharanpur and Roorkee, assist the officers incharge in implementing the national savings scheme within their respective jurisdictions.

Central Excise—For purposes of excise administration the district has been placed under the jurisdiction of the assistant collector central excise with headquarters at Saharanpur. The district forms the headquarters of the Saharanpur central excise division covering in addition to this district, Muzaffarnagar, Dehra Dun, Uttar Kashi and Pauri Garhwal. The district is divided into the ranges of Roorkee, Nakur I and II. The assistant collector is assisted in the performance of his duties by three superintendents whose headquarters are located at Hardwar and Saharanpur. The superintendent at Hardwar has under his jurisdiction, three circles and one inspection group, while the two superintendents at Saharanpur look after the inspection group at Saharanpur in addition to supervision of the ranges in their jurisdictions.

Income-tax—For purposes of income-tax collection, the district is placed under the charge of the income-tax officer incharge Saharanpur,

with headquarters in the city and the income-tax officer incharge of Roorkee. The income-tax officers are assisted by three inspectors in Saharanpur and Roorkee.

The Saharanpur circle is further subdivided into A, B, C and D wards on the basis of assessee's having an income assessed at Rs 50,000 or above, Rs 25,000 or above, Rs 10,000 and above and all salary cases. The department is headed by the commissioner of income-tax, Kanpur, being placed under the appellate jurisdiction of the appellate assistant commissioner of income-tax, Dehra Dun.

Railways—The district is traversed by the Northern Railway, being under the charge of the divisional superintendent who is the head of the division. The Saharanpur railway station is under the charge of a station master who looks after general administration within his establishment and is assisted by assistant station masters and other staff.

Staff on the maintenance side includes an executive engineer and an electric chageman, chief yard master and an assistant engineer.

The Railway Protection Force Unit at Saharanpur with its two wings, the armed wing and the Railway Protection Force, is primarily responsible for the maintenance of goods safety, etc., in the railways.

CHAPTER XI

REVENUE ADMINISTRATION

Fiscal History

The fiscal history of the region covered by the present district of Saharanpur can be traced back to very early times when it formed part of the Kuru kingdom, an early Aryan settlement.¹ Though there was no regular system of revenue administration the king used to receive tribute in return for ensuring protection of the life and property of the subjects and maintaining the machinery of administration. The tributes were usually paid in kind in the form of food-grains and other necessities of life.

The absence of authentic material relating to the early history of this area, makes it difficult to ascertain the exact set-up of fiscal administration. This tract, believed to be forming a part of the domains of the Mauryas, the Guptas, and Harshawardhan was, in all probability, subjected to the popular system of revenue administration derived through the *Smritis* (law books), the ownership of land vesting in the state and the subjects paying a portion of their produce to the ruling authority which, according to the *Smritis* varied from one-third to one-sixth.

In the early phase of Muslim conquest of India, very few references to this region are to be found in contemporary annals. The first recorded instance of the annexation of this tract, dates back to the year 1217 when Shams-ud-din Iltutmish conquered all the territory up to the Siwaliks, probably for the first time. Under Ala-ud-din Khalji (1296—1316 A. D.), the region of which the present district formed a part was subjected to measures of land reforms enforced by the ruler. The revenue demand was fixed at one-half of the produce, assessed and collected, wholly or partly in grain. Under Muhammad bin Tughluq (1325—1351 A. D.), the doab was subjected to undue pressure and pestilence owing to the fluctuating policies of the ruler. In subsequent years, the district was subjected to the invasion of Timur in 1399, the aftermath being disastrous to the country as a whole. Towards the middle of the 15th century, the doab passed into the hands of the Lodi sultans. It was apparently in a flourishing state on the eve of Babur's invasion in 1526. It was then administered by the governor of Delhi and Saharanpur was subsequently held by Babur and Humayun till the latter was ejected by Sher Shah Sur in 1541. The tract finds no mention in the annals of the Suris.

Majumdar, R. C. and Pusalker, A. D. (Ed.): *The History and Culture of the India People*, Vol. I, pp. 242, 244, 253

During Akbars' reign (1556—1605 A.D.), the system of farming out revenue was abandoned and for administrative convenience, his empire was divided into subahs, sirkars and *mahals*, placed under the charge of suitable officers : land was measured and revenue fixed at one-third of the produce and realised directly from the peasants by collectors appointed for the purpose. Saharanpur at this period was administered as a sirkar in the subah or province of Delhi. It was divided into four *dasturs* or districts of Deoband, Kairana, Sardhana and Indri. It extended from the Siwaliks into the present Meerut district, this area being subdivided into 36 *mahals* or *parganas*, of which a large number lay beyond the existing Saharanpur boundary. All the remaining were included in Deoband, the largest of the four *dasturs* and embracing a major part of Muzaffarnagar. The names in some cases were retained in subsequent years, but the boundaries frequently underwent changes, especially in the days of Rohilla supremacy and in the early years of British rule.

The details regarding the then *mahals* comprising the region which presently forms the district of Saharanpur, were as under :

Name of <i>mahal</i>	Cultivated Area (in bighas)*	Revenue paid in <i>dams</i>
Saharanpur	2,12,335	69,51,545
Raipur Tatar	4,688	3,69,080
Muzaffarabad	81,305	40,74,064
Roorkee	2,768	16,28,360
Jwalapur	94,428	23,38,120
Bhagwanpur	2,11,751	24,71,277
Malhipur	81,010	22,44,070
Mauglaur	60,987	23,50,311
Deoband	3,35,861	64,77,977
Rampur	79,419	17,77,908
Nanauta	29,224	7,24,150
Behat Kanjauwar (Sultanpur)	1,73,471	26,76,407
Sarsawa	1,06,300	25,16,125
Nakur	65,618	13,87,070
Ambahta	17,764	3,24,560
Gangoh	52,137	20,29,032
Lakhnauta	79,694	17,96,058

1 Bigha = $1\frac{1}{2}$ to $2\frac{1}{3}$ of an acre or 0.4 hectare)

The statistics of the *Ain-i-Akbari* evidently points towards the developed agrarian conditions prevailing in this tract. The cultivated area during akbar's reign covered 16,88,746 bighas or 10,55,465 acres. No definite sources regarding the quantity of the state's proportion can be ascertained, but evidently the share claimed was undoubtedly larger than that paid at a later stage to the government by the landholders. Taking the returns furnished in the *Ain* as reliable it becomes evident that this tract was in a cultivated stage at this period, the richness and fertility of the upper doab being proverbial. During the reign of Shahjahan, Jahangirabad, *mahal* was separated from Raipur Tatar and Sultanpur from Behat Kanjaware, making Faizabad the capital of the sirkar. Generally, however, no specific details are to be found regarding the fiscal history of the district during the reign of Akbar and his successors. Perhaps this could be an indication of the tranquillity prevailing in these parts, in the absence of which, contemporary annals would have recorded incidents of a contrary nature. Being under the immediate control of Delhi, the portion now forming the district of Saharanpur appears to have been a mere appanage of the central authority. The area was administered as a sirkar during the reign of Aurangzeb.

Disturbances were a common feature in the period following the death of Aurangzeb in 1707, emphasized in the initial stages by the rising of the Sikhs in the doab. This was followed by a comparatively quiet spell during the sway of the Saiyids (from 1712 onwards), the area coming eventually under the Marathas towards the later half of the 18th century. The unstable conditions prevailing here obviously allowed little scope for uniformity in administration of revenue during these years.

The area (comprising the present district) finally passed into the hands of the British in 1803, prior to which, Saharanpur was administered as a *baoni* under the Marathas. Considering the nature of the changes effected from time to time, it is evident that the fluctuations of the revenue demand would be difficult to trace, while to determine the revenue assessed at successive Settlements on each pargana is almost impossible.

Settlements—The northern division of Saharanpur was created in 1803 and the officer in charge (collector) of this area was required to make a Settlement for one year with the actual proprietors or farmers of respectability. Half of the area of the district was then held by a few powerful chiefs at a fixed revenue. Their occupation dated from the times of the Rohillas and the Marathas. These tenures were known as *muqarraris*. The revenue assessed for 1803-1804 came to Rs 1,77,371; but this excluded the parganas of Behat, Muzaffarabad, Jahangirabad and Sarsawa held by Nawab Najabat Ali Khan; and those of Roorkee, Jwalapur, Jaurasi and Manglaur; comprising the estate of the raja of Landhaura. The revenue rates fixed for these portions were those of the olden days, and the money thus collected was paid direct to the Meerut treasury. The actual sum collected in the northern division amounted to

Rs 12,49,182, but this figure was of no value for purposes of comparison since it was impossible to ascertain the portion credited to the account of the present district of Muzaffarnagar, half of which then constituted the northern division.

Settlement of 1804-05—The second summary Settlement of 1804-05 was made for a period of one year. The revenue on this occasion, excluding the sums paid by the great farmers, registered a substantive increase on that collected previously.

Settlement of 1805—The third Settlement was made under Regulation IX of 1805 for a period of three years. The revenue demand for the ordinarily settled portion of the district came to Rs 2,95,742. A much larger sum was realised in the second and third years, when the condition of this tract showed marked traces of improvement.

Settlement of 1808-09—This Settlement was followed by another to last (from 1808-09 to 1810-11 inclusive), for a period of three years. It was also conducted under Regulation IX of 1805 and was framed on the curious principle of adding to the old assessment two-thirds of the difference between the amount of that assessment and the value of the actual produce of the land at the termination of the expiring Settlement. This system yielded a large amount of revenue, the total for this district, apart from the great estates under farm, being Rs 4,76,805. However, this amount could never be collected, since the drought of 1807-08 produced serious gaps. Consequently, considerable reductions had to be allowed for in each year of the Settlement.

The Regulation IX of 1805 provided for a fresh Settlement at the expiry of the above in 1810-11. Consequently, engagements were taken for quartennial Settlement to last from 1811-12 to 1814-15. It was during this Settlement that the remaining *muqarraris* lapsed by the death of the grantees. These included the *taluka* of Patehar and the Landhaura estate. The revenue of this Settlement, representing for the first time that of the entire district, came to Rs 9,38,935.

Settlement of 1815-20—The next Settlement under Regulation X of 1812, was made for five years at the expiry of the previous operation. A revenue demand of Rs 10,60,068 was ultimately sanctioned by the government. As it was found to be excessive, partial revisions were subsequently allowed leading to reductions.

This Settlement was further extended for a period of five years to run from 1820-21 to 1824-25. It was during this period that Meerut and Muzaffarnagar became separate districts. The demand for Saharanpur alone was Rs 9,99,152. Its operation was extended for a further period of five years to terminate in 1829-30.

First Regular Settlement—The first regular Settlement in the district was effected under Regulation IX of 1833. The pargana of Manglaur was settled in 1835, and the assessment made remained in force till 1841, when it had to be reduced to the extent of about 9 per cent. Deoband and Rampur were settled in 1834, and the rest of Roorkee tahsil in 1835. Six revenue paying and 39 resumed *muafi* villages were assessed while 124 *muafi* villages and the jungles of Kheri, Pathri, Kansrao and the Siwaliks were omitted altogether. The remainder of the district was settled between 1836 and 1838. The proceedings and the records were completed in 1841.

The revenue demand of the entire district as finally sanctioned amounted to Rs 10,93,946 and though this represented a considerable increase on the preceding assessment which amounted to Rs 9,53,046, the enhancement was more apparent than real. In most cases a substantial reduction had been made and the addition was mostly due to the resumption of revenue-free estates, which now yielded about Rs 1,25,000. Considerable increase was derived from the resettlement of the lapsed portions of the Landhaura estate. The Settlement was extended for 20 years, and expired on 1st July, 1857.

Settlement of 1854—Remeasurement work and the preparation of village papers for the new Settlement operations were commenced in 1854 and ended in 1862. The total revenue of the district amounted to Rs 11,29,442.

However, this assessment was never sanctioned, as doubts soon arose as to the adequacy and equality of the Settlement. After a careful survey of the district made in 1864, a complete revision of the Settlement was ordered. This work lasted from 1864 to 1867. The net final revenue demand as assessed on the permanent *mahals* amounted to Rs 11,30,613. To this must be added the demand for the alluvial *mahals* (Rs 57,114), making a total of Rs 11,87,727. The Settlement was sanctioned for a period of thirty years, to terminate on 30th June, 1890. A noticeable feature of this period, especially towards the end, was the extensive commutation of grain rents for payment in cash. At the expiry of the term of this Settlement, the total revenue for the permanent and alluvial *mahals* came to Rs 11,84,602.

Settlement work was again commenced in Saharanpur in 1887, the work being completed by August, 1890 and the new demand being collected from the 1st July in the same year. The corrected rental was fixed at Rs 14,32,427. This Settlement was sanctioned for a period of 30 years to terminate on 30th June, 1920.

The revenue demand for the entire district in 1906 was Rs 15,43,970 giving an incidence of Rs 1.75 per acre of cultivation. This total also included the total of the alluvial *mahals* which at the last Settlement

amounted to Rs 56,587. At the preceding Settlement, some tracts were declared liable to alluvial action and were formed into separate *mahals* but these were limited in number and did not comprise all the alluvial land in the district.

Cesses were also levied in addition to the ordinary land revenue. The various dues levied in former days were amalgamated and received the consent of law in 1876. Some of these were the road cess, imposed from the date of the first Settlement, the school cess introduced in 1861, and the *dak* cess, etc. The revenue demand on account of cesses in 1906-07 came to Rs 1,57,019, being calculated on the gross revenue.

The revenue demand in the district at successive Settlements between 1917 and 1920 was as follows :

Pargana	Revenue demand between 1917-20 (in Rs)	
	Permanent	Alluvial
Tahsil Saharanpur		
Saharanpur	1,80,585-0-0	1,360-0-0
Faizabad	1,02,765-0-0	9,079-12-0
Muzaffarabad	1,20,444-6-0	3,740-0-0
Haraura	1,21,025-2-0	11,827-8-0
Tahsil Deoband		
Deoband	1,55,635-0-0	2,746-0-0
Rampur	1,68,610-0-0	1,117-8-0
Nagal	1,40,347-0-0	3,665-0-0
Tahsil Roorkee		
Roorkee	1,01,875-15-0	5,495-0-0
Bhagwanpur	1,46,783-0-0	1,698-2-0
Jwalapur	96,970-3-10	969-8-0
Mauglaur	1,42,171-0-0	3,288-12-0
Tahsil Nakur		
Nakur	94,375-0-0	1,443-0-0
Sultanpur	88,540-0-0	9,620-0-0
Sarsawa	88,387-8-0	4,423-8-0
Gangoh	94,185-0-0	2,725-4-0
Total district	18,42,632-2-10	63,198-14-0

The demand for revenue and cesses for the district in 1921 (1328 Fasli) was Rs 19,05,800 (revenue), and Rs 1,95,311 (cesses) respectively, bringing a total of Rs 21,01,611.¹ In 1338 Fasli (1931) the revenue and cess demand for the district totalled Rs 22,70,720. However, due to remission for slump in prices, the land revenue actually payable to the State amounted to Rs 18,61,332.²

In July 1952, the U.P. Zamindari Abolition and Land Reforms Act was enforced and consequently there was no fresh Settlement made. The net land revenue demand in 1972-73 (1380 Fasli) came to Rs 22,67,738. The demand for land revenue in 1381 Fasli (1973-74) came to Rs 26,62,253 while the demand for other main dues recovered as arrears of land revenue under the integrated collection scheme stood as follows : canal dues, Rs 78,60,617, tube-well dues Rs 29,50,050, Vrihat Jot Kar Rs 30,629 and Vikas Kar Rs 38,70,378.

Survey Settlement and Resettlement—The next Settlement is to take place in the district after a period of 40 years from the date of enforcement of the U.P. Zamindari Abolition and Land Reforms Act, 1950, except in respect of precarious and alluvial tracts.

Abolition of Zamindari System

The U.P. Zamindari Abolition and Land Reforms Act, 1950 (U.P. Act I of 1951), was enforced on 1st July, 1952. This Act abolished intermediaries and replaced the multiplicity of tenures existing in this district, as elsewhere, by those of the *bhumidhar*, the *sirdar* and the *asami*. Every intermediary whose right, title or interest in any estate was done away with under the provisions of this Act, became entitled to receive compensation according to a scale laid down in the Act. Up to June, 1973, the total amount of compensation assessed was Rs 1,80,82,570 of which a sum of Rs 1,79,73,759 had been paid in cash and bonds to the intermediaries. Those with comparatively smaller holdings were entitled to receive a rehabilitation grant as well. Up to June 1973, a sum of Rs 1,73,77,305 in cash and bonds had been paid to the intermediaries by way of rehabilitation grant.

Under the Act, intermediaries became *bhumidhars* of their *sir* and *khudkasht* lands and groves. Certain other tenure holders also acquired the same status in land under their cultivation provided they fulfilled certain conditions. A *bhumidhar* possesses permanent, heritable and transferable rights in his holdings from which he can not be ejected. Certain other categories of tenants who did not acquire *bhumidhari* rights, became *sirdars* of the land under their cultivation. A *sirdar* has permanent and heritable

¹ *District Gazetteers of the United Provinces, Vol. C, Meerut Division, Alterations and Additions to Part 'A' of Saharanpur Distt. Gazetteer, bringing it up-to-date (1924) p. 1*

² *District Gazetteers of the United Provinces, Supplementary Notes and Statistics up to 1931-32, Vol. IID, Saharanpur District, p. 3*

rights in his holding but can not transfer it. He may use his land only for purposes of agriculture, horticulture and animal husbandry. However, he can acquire *bhumidhari* rights in his holdings by paying to the government a sum equal to twenty times his annual rent. Certain *bhumidhars* and *sirdars* are entitled to sub-let their land, for example, those employed in the armed forces or disabled persons. An *asami* is a lessee of a *bhumidhar*, a *sirdar* or the *gaon sabha*. He has no transferable rights and is liable to ejectment for void transfer or on the extinction of the rights of the *bhumidhar* or the *sirdar* concerned, or for contravention of any other provision of the law.

In 1972-73 (1380 Fasli) the area of holdings under different tenures was as follows :

Kind of tenure	Area in hectares
<i>Bhumidhars</i>	2,55,664
<i>Sirdars</i>	1,30,458
<i>Asamis</i>	1,441

Bhumidhars and *sirdars* have been made jointly and severally responsible for the payment of land revenue to which the entire village is assessed

The U. P. Zamindari Abolition and Land Reforms Act, also established *gaon samajs* for the management of land not occupied by any holding or grove. Forests within the village boundaries, tanks, ponds, fisheries, *hats*, bazars and *melas*, and other sources of income vested in the *gaon samaj*. Every *gaon samaj* is a corporate body with all adults in the village as its members and has a land management committee to look after its property. The functions of the *gaon samaj* are now performed by the *gaon sabha*, through the above committee. The provisions relating to the management of the *gaon sabha* have recently undergone several changes, intending to provide relief to the weaker sections of the village population having no land to cultivate or house to live in. The proposals for the allotment of land by the land management committee are now required to be approved by the subdivisional officer.

Collection of Land Revenue—After the abolition of the zamindari system, land revenue is collected directly from the *bhumidhars* and *sirdars* by the government through *amins* whose work in the district is supervised by *naib* tahsildars, tahsildars and other higher officials.

The ultimate responsibility for collecting land revenue is that of the district officer. In 1972-73, the net demand of land revenue amounted to Rs 32,67,738.

LAND REFORMS

Relations between Landlord and Tenant

The present status of the tenant in the district has evolved, as elsewhere, by stages spread over a long period. It appears that in ancient times there was no intermediary between the king and the cultivator. The king, in return for a part of the produce, ensured peace and protection to the village community. In subsequent centuries, the number of rajas or kings grew and when the Muslims invaded the country and conquered parts of it, the rajas appear to have agreed to paying fixed tributes to the conquerors in order to retain their possessions. They collected their shares from the cultivators, and paid from the collections so made, the tributes due to the sovereign, thereby giving birth to the class of intermediaries.

In the period following Ala-ud-din Khalji's death in 1316, assignees of land grants apparently acquired the status of intermediaries. The absence of specific details pertaining to the area forming the present district during this time, makes it difficult to determine the relationship that may have existed between the feudal lords and peasants. However, generally speaking, little or no permanency of tenure seems to have been offered to the latter.

The diverse revenue systems which prevailed in the doab in the fourteenth century, subjected the peasants to enhanced poverty, insecurity and unduly heavy taxation; the situation further worsening towards the end, when the country was subjected to the ravage of an invasion by Timur. The area covering the present district was apparently in a flourishing state in 1526, being administered from Delhi. Land reform measures were taken up actively during the latter half of the sixteenth century. The cultivators were given a measure of stability of tenure and they knew the amount of revenue that was payable to the state. The appointment of collectors who negotiated with the cultivators rather than the headmen of the village greatly helped to allay the condition of the peasantry who were hitherto subjected to undue suppression by the landlords. However, the prosperous conditions, as reflected by the statistics in the *Ain*, can hardly be taken as a complete evidence for the equally prosperous condition of the cultivators of this area. During the later half of the 18th century, the unstable conditions prevailing here indicated that, by and large, the cultivators were subjected to insecurity of tenure being governed by diverse fiscal systems. The bulk of the land had been held by petty proprietors since a long time, the number of large estates being small. Generally, the forms of land tenure in the district were the same as in the other districts of the present Meerut Division.

The British took possession of this area in 1803. Initially, the tract forming bulk of the territory of the present district included approximately half of Muzaffarnagar which in 1804, 1824 and 1842 was further re-organized

by way of territorial adjustment. The forms of land tenure in the first half of the 20th century were largely composed of single *zamindaris*, joint *zamindaris*, perfect and imperfect *pattedari* and *bhaiyachara*. The tenures during the first decade of the 20th century were largely composed of *khudkashi*.

Cultivators with occupancy rights were evidently non-existent in the district prior to the passing of Act X of 1859. Earlier in 1838, a few persons in this class were traceable, existing as ex-proprietors. Even to a comparatively late date, the distinction between the rent-paying tenant and revenue-paying proprietor remained extremely small, and in many cases the rent was calculated merely as an advance of 25 or 50 per cent on the government demand. The legislation of 1859, caused the system of regulating rent by custom to disappear. Tenants were now classified as fixed-rate tenants, tenants with suitable right of occupancy and tenants-at-will. The zamindars henceforth began exercising their powers of enhancements, coming to loggerheads with the occupancy tenant who was almost unassailable due to his position.

At the Settlement of 1887, it was remarked that the landlords as a class were opposed to the exercise of occupancy rights of tenants, mainly on the ground that the legal difficulties to be encountered rendered the maintenance of a fair rent almost impossible. In certain parganas, e.g., Faizabad, the tenants in some cases petitioned not to be listed as occupancy on the landlords; since those who did so were subjected to gross persecution. This Settlement generally benefited the zamindars, some of whom never permitted the rights of tenants to accrue; while in certain estates, e.g., Landhaura, Jagadhari, Raipur and Behat, the tenants were subjected to such enormous pressure that they were forced in large numbers to surrender their rights by formal deeds of relinquishment. The landlords of Saharanpur actively participated in the agitation against the new law of 1901, and immense numbers of ejectments were brought about before the enforcement of this enactment.

In the first few years of the 19th century, the general condition of the cultivators apparently registered an increase in prosperity with the introduction of a revenue system based on Settlement of land which saved them from the revenue farming system of the Marathas as well as the destructive onslaughts of the Sikhs. However, though divested of some of the earlier abuses, the British system of land administration did little to help the majority of the cultivators, who, being generally lacking in education had, invariably, to rely on the *patwari* (village accountant) and the landlord. By and large, rent receipts were unknown, but there appears to have been very little of rent-racking and the tenant generally received his fair share in general prosperity. The proprietors were mostly in good circumstances. During

the first quarter of the 20th century, the proprietors continued to be in better circumstances than the tillers of the soil, a condition which appears to have continued generally till the enforcement of the U. P. Tenancy Act of 1939. The U. P. Tenancy Act, 1939 (U. P. Act No. XVII of 1939) which came into force with effect from 1st January, 1940, gave transferable rights to permanent tenure holders and fixed rate tenants. If the holding reverted back to the zamindar for any reason whatsoever, all covenants relating to the transfer and the transferee were to be binding as between the zamindar and the transferee. The Act also provided that a suit for the ejectment of the sub-lessee or a mortgagee may be filed by the landholder himself or that he may let out the holding to a new tenant who may file such a suit for the ejectment of the old sub-lessee on the termination of the period of the former sub-lease or mortgagee.

However, it was only with the passing of the U. P. Agricultural Tenants (Acquisition of Privileges) Act, 1949, followed by the U. P. Zamindari Abolition and Land Reforms Act, 1950 (Act I of 1951), that the entire system was altered and the institution of intermediaries (zamindars) which was interposed between the State and the cultivators was eliminated. The Act and its successive amendments have eliminated the yoke of landlordism and have simplified the numerous land tenures (both proprietary and cultivatory), provided security of tenure to the farmers of the district, bestowed land on the tiller and for the first time given him the ownership of the land.

Consolidation of Holdings

Consolidation operations under the U. P. Consolidation of Holdings Act, 1953 (U. P. Act X of 1954), were initially carried out in 393 villages of tahsil Deoband, on March 15, 1955. The cultivated area under these villages was 79,787.750 hectares. On February 5, 1959, these operations were commenced in 332 villages of Roorkee tahsil, covering 66,512 hectares of cultivated land. The scheme was enforced in Saharanpur tahsil in March, 1962 covering 409 villages with a cultivated area of 64,163.7 hectares. The tahsil of Nakur was brought under this scheme in October, 1964 when consolidation operations commenced in 393 villages with a cultivated area of 62,687.8 hectares. The total area brought under consolidation in all the tahsils up to 1972 was as under :

Tahsil	Area consolidated (in hectares)
Deoband	79,821
Roorkee	66,540
Saharanpur	64,191
Nakur	62,037

Under the *bhoodan* movement of Acharya Vinoba Bhave, initiated in Uttar Pradesh in 1951 with the object of obtaining land for the landless, an area of 2,345.56 hectares was received as gift for the landless in the district up to 1972. Out of this, 1,888.625 hectares have been distributed among 1,185 landless persons in the district.

Imposition of Ceilings on Land Holdings

For the purpose of an equitable distribution of land, the U. P. Imposition of Ceilings on Land Holdings Act, 1960, (Act I of 1961), was enforced in the district on 3rd January, 1961. The maximum limit of holding per family was now fixed at 40 acres (16.18 hectares) of fair quality land. For each additional number in a family of more than five, eight acres was allowed, subject to a maximum of 24 acres. All the surplus land vested in the State government. Two thousand four hundred and eighty landholders in the district were affected and an area of 487.6 hectares was declared surplus and Rs 2,80,045 assessed as compensation. Four hundred and twenty-eight hectares have been distributed to the landless so far. By an amending Act enforced in the district on June 8, 1973, the maximum holding of a tenant is now fixed at 7.30 hectares of irrigated land with 2 hectares being allowed for additional member over a family of five. This amendment affected 5,169 tenure holders in the district who held land in excess of this limit.

ADMINISTRATION OF TAXES OTHER THAN LAND REVENUE

In this district, as elsewhere in the State, the other main sources of revenue are excise, sales tax, stamps duties, registration, tax on motor vehicles and income-tax.

Excise

During the early days of British rule in the district excise or *abkari*, merely formed a portion of the miscellaneous *sayar* income that was merged in the general land revenue. Subsequent to the first summary Settlement, excise was alienated from the head of general revenue and a separate contract was made, either for single pargana or groups of parganas, for the right to manufacture and sell country spirit, as well as *tari*, hemp drugs and opium. This system remained in force till 1862, when private manufacture of spirit was abolished and government distilleries were established at Saharanpur and Roorkee for the supply of the entire district.

Initially, it was found difficult to prevent liquor smuggling and the revenue from this head registered a decrease, but soon increased receipts from this head and the growing amounts realised by the annual auction of shops, highlighted the merits of this system. The auctioning of shops was stopped in 1869, a fixed rate of Rs 5 being levied on each shop.

This system proved a failure and soon the old plan of auctions was again introduced.

The modified distillery system was applied to Saharanpur tahsil in 1880, the whole area being leased to a single contractor. This lasted for two years only. In 1891, the uniform still-head duty was abolished, the duty on liquor now varying according to the strength of the liquor issued. While this system practically doubled the amount realised, a heavy decrease was indicated in the income from licences. The Saharanpur distillery was extended in 1895, that at Roorkee being closed down in 1896. This simplified excise administration since the entire district was now served by one distillery. The department as such, did not exist during this period, and, it was in 1898 that the government appointed 48 *naib-tahsildars* designated as excise inspectors in the whole of the State to look after the excise work. However, they did not constitute an independent cadre and worked under the district officer.

Acting on the recommendations of the Indian Excise Committee set up in 1905, regarding the establishment of a self-contained executive branch of the department, the U. P. government sanctioned 4 posts of assistant excise commissioners and a post of excise inspector for each district. The excise administration within a district was still supervised by the district officer who generally delegated his powers to one of the deputy collectors designated subsequently as the district excise officer. The district was brought under the contract system in 1909, the entire area along with Bijnor and Muzaffarnagar being leased to a contractor, who had to manufacture liquor at a specified distillery within the area, namely Saharanpur, where government premises were leased for Rs 1,000 annually while a bonded warehouse was maintained at Roorkee.

The district is presently headed by a district excise officer and is placed under the charge of the assistant excise commissioner with headquarters at Meerut at the regional level. The district officer is assisted by six excise inspectors looking after the six preventive circles of city (2 circles), Nakur, Deoband, Roorkee and Hardwar into which the district is divided.

Opium—The district never had poppy cultivation, though opium was largely in demand among certain sections of the local populace as well as with the pilgrims coming to Hardwar. Nearly all the opium consumed here in the early years of the 20th century was purchased at the licenced shops which were usually auctioned. The preparations of opium known as *chandu* and *madak* were prohibited in 1893. A good deal of difficulty was experienced in suppressing the *chandu* traffic in the towns and prosecutions for offences against the law in this respect were not uncommon even at the beginning of the 20th century. There is no cultivation of opium in the district even at present and registered addicts get it issued on permits issued from the office of the district excise officer. The number of opium addicts in the district in 1973-74 was 23 their distribution in the four tahsils being as follows :

Tahsil	No. of addicts
Saharanpur	17
Nakur	1
Deoband	5
Roorkee	NII

The district is divided further into the following excise circles in addition to the preventive circles :

- | | |
|---------------|----------------------------|
| 1. Sector I | City |
| 2. Sector II | City |
| 3. Circle III | |
| 4. Circle IV | (a) Roorkee
(b) Hardwar |

Each of these circles is placed under the charge of an excise inspector.

The district has two distilleries of which the Co-operative Distillery at Saharanpur traces its origin to the year 1910. The types of liquors manufactured here include country liquor and spiced fruit liquor or *malta*. The other distillery, known as the Pilkhani Distillery and Chemical Works is located at Pilkhani in tahsil Nakur which utilises the latest techniques for distillation. It manufactures country liquor, both plain and spiced, Indian made foreign liquor and rectified spirits.

Hemp Drugs—Hemp drugs are chiefly consumed in forms called charas, bhang and ganja. The contract system was in force with regard to the sale of hemp drugs in the district in early days, the only modification being introduced in 1901, when the lease of the entire district was given for a period of three years. It appears that the consumption of these drugs was enormous in the nineteenth century, but the imposition of a higher rate of duty on charas in 1899, considerably diminished the receipts. Charas was imported from the Punjab to the warehouse at Saharanpur, while ganja, prepared from dried hemp leaves, grew abundantly in the district, especially in the submontane tract. The right to collect and store bhang was vested in the contractor.

The collection of bhang is now made from spontaneous growth and no regular cultivation is to be found in the district. For the purpose of whole sale supply, bhang is stored at Pathri in tahsil Roorkee. It is supplied through contract bonded warehouses located at Saharanpur and Roorkee.

Sales Tax—Sales tax is levied in the district under the U. P. Sales Tax Act, 1948. For purposes of administration of this tax, the district has been

divided into two circles, viz., Saharanpur and Roorkee, each under a sales tax officer.

The amount realised as sales tax (Central & State) in respect of important commodities in the two circles in 1970-71 is given in the following statement :

Commodity	Amount (in Rupees)
<i>Kirana</i>	4,95,224-00
Bricks	5,44,295-00
Food-grain	6,69,502 00
Kerosene oil	38,449-00
Bullion and gold ornaments	62,756-00
Cotton yarn	3,946-00
Oil-seeds	1,81,206-00
Cement	97,800-00
Brassware	62,212-00
Sugar	67,039-00
Excise goods	29,958-00
Timber	2,35,767-00
General merchandise	75,581-00
Drugs	1,65,131-00
Iron and hardware	51,637-00

The net collections from sales tax between 1965-66 and 1971-72 were as follows :

Year	Amount (in Rupees)
1965-66	61,09,176
1966-67	73,16,873
1967-68	93,52,903
1968-69	1,18,12,692
1969-70	1,35,29 833
1970-71	1,42,67,484
1971-72	1,09,64,762

Entertainment Tax

Entertainment tax in the district is realised from cinemas, circus shows, *nautankis* (open air performances), dramas and other variety programmes. The city magistrate functions as the district entertainment tax officer having under his charge three inspectors posted at Saharanpur, Roorkee and Hardwar to enforce its provisions. The following statement shows the amount collected as entertainment tax between 1966-67 and 1970-71 :

Year	Amount (in Rupees)
1966-67	19,12,343
1967-68	20,68,168
1968-69	25,50,520
1969-70	28,54,132
1970-71	35,41,845

Stamps

Under the Indian Stamps Act, 1899 (Act II of 1899) stamps are classified as judicial and non-judicial. Judicial stamps are used in payment of court fee and non-judicial stamps on bills of exchange, receipts involving a sum of Rs 20 or more and documents in respect of which stamp duty is payable. Income from this source also includes fines and penalties realised under the Act. The receipts under this head in the district between 1967-68 and 1970-71 were as follows :

Year	Receipts (in Rupees) from stamps			
	Judicial		Non-judicial	
	Saharanpur	Roorkee	Saharanpur	Roorkee
1967-68	6,15,168	73,384	16,73,606	5,64,822
1968-69	6,99,841	1,07,123	19,60,923	6,37,560
1969-70	7,41,100	1,11,590	25,81,763	6,21,525
1970-71	8,10,668	1,27,326	27,68,565	68,1,823

Stamps are sold through the district treasury, the sub-treasuries and licensed stamp vendors. There are, at present 44 licensed stamp vendors in the district.

Registration

Under the Indian Registration Act, 1908 (Act XII of 1908), documents such as instruments of gifts, sale or lease of immovable property and documents relating to shares in joint-stock company have to be registered. The district judge is also the district registrar. Registration work is also done by 5 subregistrars posted at Saharanpur, Roorkee, Deoband, Nakur and Hardwar.

The following statement shows the income from and expenditure on registration between 1966-67 and 1970-71 :

Year	Income (in Rs)	Expenditure (in Rs)
1966-67	7,17,180	80,541
1967-68	9,06,437	1,06,873
1968-69	10,06,769	1,24,310
1969-70	12,34,181	1,34,123
1970-71	12,29,006	1,31,060

Tax on Motor Vehicles

Taxes on motor vehicles in the district are levied under the U. P. Motor Vehicles Taxation Act, 1935 (Act V of 1935), and Indian Motor Vehicles Act, 1939 (Act IV of 1939). The regional transport officer with headquarters at Dehra Dun is incharge of this district. The net collection from these sources in 1972-73 amounted to Rs 96,97,383 in this region.

Under the provisions of the U. P. Motor Vehicles (Yatri-kar) Adhiniyam, 1962 a tax was imposed on passengers travelling in public or private motor vehicles plying on hire. The collection under this head in the whole region amounted to Rs 48,12,678 in 1970-71.

The Motor Gadi (Mal-kar) Adhiniyam, 1964 provides for the levy of a tax on goods carried by motor vehicles, an amount of Rs 32,60,852 being collected in the whole region in 1972-73. The total collection from all the above sources in the region amounted to Rs 1,77,70,915.

Income-Tax

For purposes of income-tax collection, the district is placed under the charge of the income-tax officer incharge of Saharanpur, with headquarters in the city and the income-tax officer incharge of Roorkee. The income-tax officers are assisted by three inspectors in Saharanpur and Roorkee.

The Saharanpur circle is further subdivided into A, B, C and D wards on the basis of assessee's having an income assessed at Rs 50,000 or above, Rs 25,000 or above, Rs 10,000 and above, and all salary cases. The department is headed by the commissioner of income-tax, Kanpur, being placed under the appellate jurisdiction of the appellate assistant commissioner of income-tax, Dehra Dun. The following statement shows the amounts collected as income-tax under allied heads, e.g., wealth tax and gift tax in the district between 1962-63 and 1972-73, there being no expenditure tax assessed in the district :

Year	Income-tax		Wealth tax		Gift tax	
	No. of assessee's	Amount (Rs)	No. of assessee's	Amount (Rs)	No. of assessee's	Amount (Rs)
1962-63	3,25	21,080	72	46,000	31	24,000
1963-64	3,508	22,000	76	48,000	26	19,000
1964-65	3,942	25,000	85	59,000	28	22,000
1965-66	4,201	28,000	98	64,000	24	14,000
1966-67	4,718	30,000	110	72,000	36	21,000
1967-68	5,026	34,000	120	79,000	32	18,000
1968-69	5,104	36,000	129	73,000	22	13,000
1969-70	5,976	38,000	108	62,000	29	19,000
1970-71	6,885	44,000	170	61,000	47	16,000
1971-72	7,216	47,000	118	1,66,000	230	54,000
1972-73	7,485	61,000	236	2,29,000	290	1,43,000

Central Excise

The assistant collector of central excise with his headquarters at Saharanpur exercises jurisdiction over the districts of Saharanpur, Dehra Dun, Uttar Kashi, Garhwal and Muzaffarnagar. Each of these districts is placed under superintendents who work under the overall supervision of the assistant collector of Saharanpur division. The district is divided into three ranges namely, Roorkee, Nakur I, and Nakur II, placed under the charge of excise inspectors.

The three circles and one inspection group at Hardwar are also placed under the charge of the superintendent posted there, while the superintendent at Saharanpur looks after the inspection group in the city range in addition to supervision of the work of inspectors posted under him. The important commodities dealt with by this department are tobacco, textiles, paper and sugar.

The excise revenue realised (in rupees) from these commodities in 1972-73 was as under :

Commodity	Revenue
Cigarette	2,23,569
Tobacco	38,859
Paper and paper board	11,659
Cotton yarn	638
Cotton fabrics	450
V. P. sugar	26,564

The excise revenue collected in the district from 1968-69 to 1971-72 was as under :

Year	Amount (in Rs)
1968-69	24,514
1969-70	2,07,880
1970-71	2,47,124
1971-72	3,32,823

CHAPTER XII

LAW AND ORDER AND JUSTICE

LAW AND ORDER

About the beginning of the twentieth century, the most prevalent types of crime in the district were cattle theft and burglary. The former occurred throughout the district, but was most common in the areas bordering the Yamuna and the Ganga. It was a regular occupation of the Gujars and Rangars, who frequently operated in collusion with their caste-fellows in the adjoining tracts of the Punjab and specially in the semi-independent state of Chachrauli in the Ambala district, which afforded a safe heaven of refuge for stolen cattle. Burglary was more widespread and its practice was not confined to any particular caste. The same may be said of petty theft, the most usual form of crime in every agricultural district. Dacoity was not prevalent, and the few cases investigated every year were generally of a technical nature. Organised gangs seldom troubled the district, though in both 1906 and 1907 cases of professional dacoity were reported. Counterfeit coining was very rare and forging of notes was unknown. Cases under the Excise and Arms Acts were not frequent but there were many seizures of illicit cocaine which was smuggled from Delhi and consumed to a rapidly increasing extent. As regards special forms of crimes mention may be made of robbery by poisoning which occurred from time to time at Hardwar and on the roads leading to that place. The culprits were either real or disguised mendicants of some religious order and were regarded as professional poisoners. In all such cases *dhatura* was the poison invariably employed. About the end of the nineteenth century Hardwar was also notorious as a centre for kidnapping and disposing of hill women, but this class of crime disappeared by 1910 because of the capture of several members and the dispersal of the gangs committing these offences. Between 1899 and 1906 the district was exploited by a criminal tribe of Sansia Jats from the Punjab. They were distinct from the ordinary Sansias, who resided everywhere in the district, though they constantly shifted their habitations, moving from place to place in this and the adjacent districts to the north and south. These Sansias in times of scarcity became more active and took to looting carts on the highways. They visited the district at intervals and were always present during the bathing fairs at Hardwar where they assumed the garb of faqirs. They were addicted to theft and cheating, but were not considered dangerous criminals.

The criminal work of the district is heavy, specially in respect of minor offences. The most prevalent types of crime are cattle theft and burglary.

The former occurs throughout the district but is most common in the areas bordering on the Yamuna and the Ganga. Burglary is more wide-spread and the same may be said of petty thefts. Dacoity is not much prevalent and organised gangs seldom trouble the district. The crime position with regard to offences of heinous nature like murder are on the increase and cases of causing grievous hurt and attempt to commit murder are becoming common. They are mostly due to party feuds. Cases of forgery and cheating, which were rare, are now on the increase. Offences of kidnapping, abduction and rape have become common and those under the acts relating to arms and excise, prevention of cow slaughter, food adulteration, gambling (specially *satta*) have also become rampant in recent years. Smuggling of goods to Punjab has also become very common in the police circles of Chilkana, Sarsawa and Gangoh which adjoin other States.

Organisation of Police

In the early days of British rule there was no regular police in existence and the duty of maintaining watch and ward was performed very inefficiently by the village watchmen, who were the servants of the zamindars or by the police entertained or supposed to be entertained by the tahsildars. The latter were but farmers of the revenue, and consequently it was but natural that they should neglect their police duties and be unwilling to expend sufficient money on the upkeep of an adequate staff. The system did not work successfully and in 1807 was abandoned and the control of the police was handed over to the magistrate. A force was then raised and was located in a few stations, mainly at the tahsil headquarters. In 1844, this arrangement was somewhat modified when the circles were made to correspond, as far as possible, with the revenue subdivisions, the stations then being at Saharanpur, Muzaffarabad, Roorkee, Jwalapur, Deoband, Rampur, Nakur and Gangoh. After the uprising of 1857 a considerable change was effected, the area of circles being greatly reduced, with the resultant increase in the number of police-stations while several small out-posts were established in the more remote localities. The new police-stations comprised those at Fatehpur, Behat, Chilkana, Manglaur, Sarsawa, Sultanpur Kunari, Nagal, Mohand, Badgaon, Bhagwanpur, Nanauta, Mirzapur, Basi and Dasuni. In addition to these were out-posts at Hardwar, Kankhal, Gagaheri, Mandaoli, Phandpuri and Tanda Man Singh. Thus, about 1900, the district was divided into 22 police-stations and it also had the municipal police and the town police. The internal administration, discipline and deployment of the police was under the control of a superintendent, who in 1907 was assisted by an assistant superintendent, two circle inspectors, a reserve inspector, a prosecuting inspector, 40 subinspectors, 72 head constables and 531 constables, besides 120 persons of town police, 213 of municipal force and 1,692 of rural police and 58 of road police. The district magistrate was, and continues to be, the head of the police force in the district for maintenance of law and order.

In 1905, the municipal police and in 1911 the town police were converted into the provincial police. A few years later the number of police-stations was reduced to 18 by abolishing the police-stations at Nanauta, Sultanpur Kunari, Dasuni, Mirzapur, Sarawa and Basi and opening two at Laksar and Manglaur. In 1921 the district had 16 police-stations, those at Mohand, Muzaffarabad and Fatehpur were abolished and a new one at Biharigarh was established. The gazetted staff consisted of a superintendent and a deputy superintendent, in addition to an assistant superintendent at Roorkee. The lower staff comprised 44 subinspectors, 89 head constables and 797 constables.

At present the district is included in the Meerut police range under the superior charge of a deputy inspector general of police with headquarters at Meerut. The district police is divided into two broad divisions—the civil police and the armed police and the prosecution unit—which is now under the control of the district magistrate.

Civil Police—The police force of the district is under the control of a superintendent of police who is assisted by five deputy superintendents, besides two inspectors, 69 subinspectors, 110 head constables, 877 constables and reserve police men which is armed.

For the maintenance of law and order the district has been divided into 5 police circles each under the charge of a deputy superintendent of police.

The following statement gives the description of the police circles and the names of police-stations and out-posts under them :

Police circle	Police-station	Police out-posts
City	Kotwali	Choki Sarai
		Mali Gate
		Chowk
		Nawabganj
		Numais Camp
	Sadar Bazar	Khalasi Line
		Kutub
		Camp
		Civil Lines
		Labour Colony

[Continued]

Police circle	Police-station	Police out-posts
	Mandi	Katahra Pratham Katahra Dwitiya Mandi Shahbahlal
Nakur	Chilkana	—
	Nakur	Ambahta
	Gangoh	Gangoh
	Behat	Raipur
Deoband	Deoband	Rail Bhaila Manglaur Rajupur Balia Kheri Rampur Jarhoda Pandha Shraut (A) Shraut (B) Tahsil Ganeshpur Civil Lines Ramnagar Muzaffarabad Mohand Gagalheri Manglaur Hardwar Mayapur Kankhal Kharh Kharhi
Roorkee	Nagal Rampur Badgaon Roorkee	Rail Bazar B.H.E.L. Raisi
	Bibarigarh	
	Fatehpur	
	Manglaur	
Hardwar	Hardwar	
	Jwalapur	
	Lakear	

Armed Police—The armed police the reserved force of the district is stationed at the reserve police lines. In October, 1972, it consisted of an inspector, three subinspectors, 60 head constables and 239 constables. The services of the armed police are utilized for escorting prisoners, guarding government property and treasure and government treasuries, patrolling and combating dacoits.

Prosecution Unit

In 1972 the prosecution staff was comprised of a public prosecutor and 8 assistant public prosecutors. The main function of the prosecution unit is the presentation of police cases in the criminal courts of the district. It is now under the control of the district magistrate.

Village Police

The institution of village chowkidars, who form the lowest rung of the police organisation, may be traced to a period when there existed no regular police and when each village had its own chowkidar to assist the village headman in maintaining law and order and guarding crops and property. He was then the servant of the village community and was remunerated with a share of their produce by the cultivators. Later he was placed under the control of the zamindars for the proper discharge of his duties and was paid by them. Under the North-Western Provinces Village and Road Police Act, the district magistrate was made the appointing and dismissing authority of the village chowkidars. The actual control and supervision over them, however, rested with the superintendent of police, an arrangement that still continues. They are now attached to the police-stations and are paid by the government. Their main duty is to report to the local police the occurrence of important crimes and other incidents in their area. They also act as process-servers of the *nyaya* panchayats for which they are paid separately. The number of chowkidars in the district was 758 in 1971.

Pradeshik Vikas Dal

This is a voluntary organisation set up in the district in 1948 to mobilize rural man power, carry out youth welfare activities in the rural areas and organise villagers for self-defence. The paid staff consists of a district organiser, 16 block organisers and physical training instructor, the unpaid staff comprising of 153 *halqa sardars* (circle leaders), 1,216 *dolpatis* (group leaders), 6,080 *tolinayaks* (section leaders), and 60,800 *rakshaks* (guards). Members of the organisation are sometimes called for duty in fairs and are required to guard and patrol vulnerable points during emergencies.

Village Defence Societies

The village defence societies are purely non-official organisations, set up to foster a spirit of self-defence in the residents of the rural areas against criminals, particularly dacoits and thieves.

Government Railway Police

In the district there is a government railway police-station at Saharanpur and an out-post at Khanalampur yard. The police-station has strength of 61 and the out-post of 8.

The jurisdiction of the police-station covers the railway stations of Deoband, Telhar Buzurg, Nagal, Tapri, Saharanpur junction, Khanalampur, Pilkhani and Sarsawa.

The main duties of the staff are maintenance of law and order and controlling crime within railway precincts. The police-station functions under the superintendent of police, government railway police, Moradabad section, with headquarters at Moradabad.

Jails and Lock-ups

District Jail—The district jail is located in the old fort at Saharanpur, which has been utilised for this purpose from an early date. The building has been altered and repaired from time to time to meet the needs. It is under the superintendence of the Mukhya Chikitsa Adhikari of the district, but is in the immediate charge of a jailor who is assisted by a deputy jailor and three assistant jailors. The jail hospital is looked after by a part-time doctor, called the assistant medical officer. The inspector general of prisons, U. P., who has his headquarters at Lucknow, is the head of the department for all matters relating to the administration of jail.

The jail has accommodation for 355 prisoners, their daily average population since 1966 being as follows :

Year	Convicts	Prisoners under-trial
1966	195	190
1967	210	188
1968	201	205
1969	132	176
1970	147	190
1971	141	199
1972	147	216

The main industries in which the inmates of the jail are gainfully employed are making of *niwar* (thick wide cotton tape used as webbing for beds, etc.), and *moonj* mats besides recaning of chairs.

Welfare of Prisoners—Prisoners and under-trials were formerly divided into three categories 'A', 'B', and 'C' but since 1948 they are classified only as 'superior' or 'ordinary' prisoners.

The basic treatment of prisoners and under-trials along humane lines has improved considerably after Independence. They now get regular wages for the work they do in jail, apart from an allowance from relatives for personal needs, they are encouraged to learn the three 'R's, and take part in constructive activities, and are provided with newspapers, books and periodicals from the jail library, and allowed facilities for recreation, such as taking part in indoor and outdoor games, dramatic and musical performances and religious discourses.

Revising Board

For periodical review of cases of all the convicts, sentenced to terms of imprisonment of three years or more, the district jail is governed by the revising board at Agra.

Official Visitors

The exofficio visitors of the jail are the director of medical and public health services, U. P., the Commissioner of the Division and the district and sessions judge.

Non-official Visitors

The State government appoints non-official visitors of the jail from amongst prominent citizens of the district, they are authorised to write inspection notes in their own hand and their term of office is usually two years. The number of visitors appointed at present is 8.

All the local members of the State and Central Legislatures, all members of the standing committee of the State Legislature on jails, the chairman of the central committee of the Uttar Pradeshiya Apradh Nirodhak Samiti and the secretary of its district unit, chairman of the municipal board, Saharanpur and the Adhyaksh Zila Parishad are the non-official visitors of the jail. They constitute the board of visitors, which visits the jail twice a year on dates fixed by the superintendent of the jail, in consultation with the president and the members of the board, the president being the district and sessions judge, Saharanpur,

Lock-ups

A lock-up is located in the premises of the collectorate for custody of the prisoners brought from jail to courts to attend the hearing of their cases and persons sentenced to imprisonment by courts before they are taken to the district jail. It is supervised by the public prosecutor and is under the control of the district magistrate. There is another similar lock-up in the Roorkee court compound. At each police-station also, there is a lock-up under the charge of the station officer, and has accommodation for about five persons.

At the headquarters of each tahsil also there is a revenue lock-up, usually a small room, to detain persons for non-payment of government dues under the revenue law. Such defaulters may be detained for a maximum period of 14 days at a time.

Probation

In 1973, the U. P. First Offenders Act, 1938, was introduced in the district. The reformation officer at Saharanpur, who was working in the district for the last six years under the U. P. Children Act, 1951, has been given the additional powers of the district probation officer in September, 1974 and designated as district probation-cum-reformation officer. He deals with the genuine delinquents probationers as well as children under-trials who are kept for custody in the Observation Home at Saharanpur and the Rescue Home at Fatehpur (Saharanpur). The officer pays domiciliary visits and also meets the probationers and children to assess the possibility of their rehabilitation in society through various educational, welfare and employment agencies. By the end of 1974, about 70 probationers were under supervision. 1,738 visited the office, 548 domiciliary visits were paid by the officer and about 680 to Rescue Home and 16 probationers were rehabilitated. Under the U. P. Children Act, 1951, from 1969 to 1974 the Observation Home, Saharanpur, rendered the following services :

Children admitted	393
Released on bonds under supervision	80
Resorted to parents	92
Acquitted	116
Admitted in schools	80

JUSTICE

Civil Justice—About 1900, in the district the civil courts were those of the district judge, the subordinate judge and the *munsifs* of Saharanpur and Deoband, the latter's circle comprising Deoband and Roorkee tahsils, while the subdivisional officer at Roorkee was invested with the powers of a judge of small causes.

At present the permanent civil courts in the district are those of the district judge, civil and assistant sessions judge, Saharanpur, civil and assistant sessions judge, Roorkee, *munsif* city, *munsif* Roorkee, additional *munsif* Roorkee, *munsif*, Hawali, and *munsif* Deoband, besides two temporary courts of the civil and sessions judges.

The district judge who is the head of the judiciary in the district, and the civil and sessions judges, have unlimited original pecuniary jurisdiction in civil cases, besides exercising appellate and revisional jurisdiction in criminal cases and powers of hearing revisions in cases tried by the court of small causes. They have also power to hear certain other cases for which jurisdiction has been conferred upon them by various other Acts and Statutes. The *munsif* disposes of regular civil suits up to a valuation of Rs 8,000 and may also dispose of cases of the court of small causes up to a valuation of Rs 500.

There are two bar associations at Saharanpur, viz., Civil Courts Bar Association and Collectorate Bar Association, both of which were founded about 1900 and have now 85 and 177 members respectively. The building of the former was completed in 1904 and that of the latter in 1966 and house a well equipped library of law books and journals and a reading-room for the use of its members. There is also a bar association at Roorkee which was established in January, 1914. It has now 58 members and maintains a library.

The position of the case work in the civil courts in the year 1973 was as follows :

Cases	Number
Pending at the beginning of the year	4,936
Instituted during the year	3,098
Disposed of during the year	3,194
Pending at the end of the year	4,840

In the same year the number of suits instituted involving immovable property was 1,126, those relating to money and movable property were 1,270, suits under specific Relief Act were 581, those concerning matrimony were 56, and those relating to mortgage were 6, besides 43 other suits.

The number of suits instituted in 1973, according to valuation, were as follows :

Valuation	No. of suits
Not exceeding Rs 100	142
Exceeding Rs 100 but not Rs 1,000	1,769
Exceeding Rs 1,000 but not Rs 5,000	867
Exceeding Rs 5,000 but not Rs 10,000	221
Exceeding Rs 10,000 but not Rs 20,000	55
Exceeding Rs 20,000	50

Total valuation of the property in the suits so instituted was Rs 75,15,525.

Details of the modes of disposal of suits in the year 1973 were as follows :

Manner of disposal	No. of suits
Disposed of after trial	766
Dismissed in default	761
Otherwise decided without trial	482
Decreed <i>ex parte</i>	308
On admission of claims	8
Settled by compromise	498
By reference to arbitration	2
Total	2,825

The position of appeals instituted and disposed of in the year 1973 was as follows :

Nature of appeals	Instituted	Disposed
Regular civil appeals	427	243
Miscellaneous civil appeals	481	444

Criminal Justice—About the same period the magisterial staff comprised a joint magistrate and three deputy collectors, while the Roorkee tahsil

formed a subdivision under the control of a joint magistrate residing at Roorkee. There were also four tahsildars and several honorary magistrates including a bench of four at Saharanpur, one at Deoband and another magistrate exercising third class powers within the police-circles of Fatehpur, Muzaffarabad and Bhagwanpur.

The district and sessions judge constitutes the chief criminal court of the district. There are also three sessions judges besides two assistant sessions judges who can award a sentence of imprisonment up to ten years. There are also courts of the additional district magistrate (judicial) and four judicial magistrates who exclusively try all cases under the Indian Penal Code. *Munsifs* have also been invested with first class magisterial powers. These courts can impose fine up to Rs 2,000 and award rigorous imprisonment up to 2 years.

Some details of criminal cases relating to the years 1972 and 1973 are given below :

CASES COMMITTED

Nature of offence	No. of cases committed to sessions	
	1972	1973
Affecting life	89	99
Kidnapping and forcible abduction	10	11
Hurt	21	13
Rape	13	13
Unnatural offences	2	2
Robbery and dacoity	55	63
Other cases	39	45

PERSONS TREND AND SENTENCED

Persons tried/sentenced	1972	1973
Tried	686	730
Death	3	1
Life imprisonment	18	23
Rigorous imprisonment	115	110
Simple imprisonment	—	—
Fined only	—	—
Other punishment	8	8

The collector exercises first class magisterial powers under the designation of the district magistrate and is the executive head of the district. He has working under his control an additional district magistrate (executive), a city magistrate, four subdivisional magistrates and two extra magistrates, all exercising first class magisterial powers.

The statistics of cases in these courts and persons involved in them are as follows :

Nature of cases	1972		1973	
	No. of cases	Persons involved	No. of cases	Persons involved
Under Cr. P. C.	1,083	4,042	1,341	4,588
Under I. P. C.	538	1,635	385	405
Under Special and Local Acts	13,147	13,986	11,738	13,593

SENTENCES AWARDED

Nature of sentences	No. of persons sentenced	
	1972	1973
Rigorous imprisonment	576	173
Simple imprisonment	553	301
Fine only	9,211	9,292

The position regarding cognizable crimes under the Indian Penal Code and the Special Acts in the years 1969 to 1973 was as follows :

Year	Cases reported to police	Cases investigated	Cases sent to courts	Cases pending		Cases disposed of		
				At beginning of year	At end of year	Convicted	Discharged or acquitted	Compounded
1969	$\frac{184}{36}$	$\frac{2,338}{732}$	$\frac{2,029}{750}$	$\frac{874}{737}$	$\frac{561}{224}$	$\frac{241}{429}$	$\frac{281}{197}$	—
1970	$\frac{235}{31}$	$\frac{3,780}{598}$	$\frac{2,662}{603}$	$\frac{943}{585}$	$\frac{718}{310}$	$\frac{300}{374}$	$\frac{367}{175}$	—
1971	$\frac{219}{90}$	$\frac{3,442}{453}$	$\frac{2,529}{472}$	$\frac{832}{379}$	$\frac{730}{213}$	$\frac{111}{409}$	$\frac{264}{88}$	—
1972	$\frac{427}{838}$	$\frac{3,347}{705}$	$\frac{1,521}{424}$	$\frac{178}{62}$	$\frac{377}{174}$	$\frac{377}{174}$	$\frac{258}{65}$	$\frac{44}{—}$
1973	$\frac{3,949}{635}$	$\frac{3,418}{750}$	$\frac{1,433}{542}$	$\frac{276}{145}$	$\frac{354}{127}$	$\frac{354}{127}$	$\frac{189}{78}$	$\frac{27}{—}$

N. B. :—The numerator represents the number of offences under the I. P. C. and the denominator that of offences under Special Acts and local laws.

The number of cases of non-cognizable crimes tried in courts were 462 in 1970 and 534 in 1971.

The number of cases relating to important crimes like murder, dacoity, robbery, etc., with details of convictions and acquittals in the year from 1969 to 1973 were as given in the following statement :

Crime	1969	1970	1971	1972	1973
Murder					
Reported	33	47	42	54	58
Convicted	10	8	—	6	8
Acquitted	19	9	—	6	16
Dacoity					
Reported	24	35	52	37	76
Convicted	6	2	—	3	3
Acquitted	8	13	—	4	5
Robbery					
Reported	28	91	138	118	112
Convicted	9	3	4	8	4
Acquitted	5	1	—	6	6
Riot					
Reported	106	264	238	214	202
Convicted	31	18	2	29	4
Acquitted	20	6	1	8	2
Theft					
Reported	1,002	2,195	1,840	1,598	1,804
Convicted	120	114	61	103	65
Acquitted	49	44	1	34	15

[Continued

Crime	1969	1970	1971	1972	1973
House breaking					
Reported	590	946	825	715	760
Convicted	48	49	20	30	33
Acquitted	35	27	6	27	15
Kidnapping					
Reported	10	71	63	59	87
Convicted	3	3	1	20	2
Acquitted	5	3	—	1	2
Rape and unnatural offences					
Reported	11	19	15	5	6
Convicted	5	2	—	—	—
Acquitted	3	—	—	—	1

The administration of criminal justice is carried on according to the provisions of the Criminal Procedure Code of 1898, as amended from time to time. A new Code has now replaced the old one from April 1, 1974 which has introduced changes in the magisterial set-up, given some more facilities to accused persons and attempted to make the procedure of trial more simple and quick. It has also brought about a complete separation of the judiciary and the executive.

Separation of Executive from Judiciary

Partial separation of the executive from the judicial magistracy was enforced in the district in the year 1962 with the creation of the posts of additional district magistrate (judicial) under whom the judicial magistrates were placed. As a rule judicial officers tried cases under the Indian Penal Code and suits and proceedings under the U.P. Zamindari Abolition and Land Reforms Act. Cases under the preventive sections of Code of Criminal Procedure and Local and Special Acts and proceedings under the Land Revenue Act continued to be tried by the executive magistrates and assistant collectors incharge of subdivision.

As a further step towards separation of the judiciary from the executive the additional district magistrate (judicial) and the judicial magistrates working under him were transferred to the control of the district and sessions judge, with effect from October 2, 1967. They tried cases under the Indian Penal

Code. The judicial magistrates were to be utilized for law and order duties by the district magistrate only in an emergency and with the prior approval of the district and sessions judge. For such occasions, however, all executive officers posted in the district exercise first class magisterial powers and all *naib tahsildars* with second class powers, in order that they may be utilized for the maintenance of law and order. The process has found its logical culmination in the new Code of Criminal Procedure, which ensures an almost absolute separation. The executive magistrates have now been relieved entirely of their judicial functions both under the Indian Penal Code and other enactments, and are to perform only executive duties related to the maintenance of public peace, law and order. The new Code also takes out the prosecuting unit from the control of the superintendent of police and has placed it under the direct superintendence and control of the district magistrate.

Nyaya Panchayats

Panchayati adalats now called *nyaya* panchayats were established in the district in 1949 under the U. P. Panchayat Raj Act, 1947, to entrust the village people with the adjudication of petty offences and certain civil disputes locally. The jurisdiction of a *nyaya* panchayat usually extends over an area of five to ten Gaon Sabhas depending on the population of the constituent villages. The total number of *nyaya* panchayats in the district was 153 in 1949. The number has now gone up to 155.

The panchs of the *nyaya* panchayats are nominated from amongst the elected panchs of the *gaon* panchayats by the district magistrate with the assistance of an advisory body. These panchs elect from amongst themselves the *sarpanch*, who is the presiding officer, and a *sahayak* (assistant) *sarpanch*. In 1973 there were 155 *sarpanchs*, an equal number of *sahayak sarpanchs* and 2,750 panchs of the *nyaya* panchayats in the whole district.

The panchs are honorary workers and hold office for a period of five years. Their term of office can be extended by a year by the State government. The cases are heard by benches consisting of five panchs each and constituted by the *sarpanch* annually. The presence of at least three panchs, including a *sarpanch*, at each hearing, is essential.

The *nyaya* panchayats are empowered to try criminal and civil cases under the Act or specific sections thereof as given below :

(a) All cases under the U. P. Panchayat Raj Act, 1947

(b) Sections

140	269	290	352	403*	431	509
160	277	294	357	411*	447	510
172	283	323	358	426	448	
174	285	334	374	428	504	
179	289	341	379*	430	506	

*Involving property not exceeding an amount of Rs 50 in value

- (c) Sections 24 and 26 of the Cattle Trespass Act, 1871
- (d) Subsection 1 of section 10 of the U. P. District Board Primary Education Act, 1926
- (e) Sections 3, 4, 7 and 13 of the Public Gambling Act, 1867

The *nyaya* panchayats also try civil suits up to a valuation of Rs 500, and any dispute not pending in any court in accordance with any settlement, compromise or oath if the parties concerned agree in writing to such a course. They are not authorised to award sentences of imprisonment and can impose fines only up to hundred rupees. Revision applications against their decisions in civil, criminal and revenue cases lie respectively to the *munsif*, the subdivisional magistrate and the subdivisional officer concerned. The number of cases instituted in the *nyaya* panchayats and disposed of by them during the years 1967-1968 to 1971-1972 was as follows :

Year	Cases pending at beginning of year	Cases instituted during year	Cases disposed of
1967-68	135	1,639	1,473
1968-69	166	1,106	1,161
1969-70	111	1,066	1,026
1970-71	151	802	811
1971-72	142	358	268

CHAPTER XIII

OTHER DEPARTMENTS

The chapter deals with those departments of the State government which are not mentioned in the three preceding chapters.

AGRICULTURE DEPARTMENT

Agriculture

The district falls within the jurisdiction of the deputy director of agriculture, Meerut region, Meerut. All the agricultural programmes, including the formulation and implementation of Five-year Plan schemes for the district, are looked after by a project officer assisted by a district agriculture officer and three additional district agriculture officers. There is also a separate officer who looks after the production of seeds.

There are 17 assistant development officers (agriculture) and 15 assistant development officers (compost) for implementation of programmes, supervision of seed stores, distribution of fertilizers and recovery of dues.

There are 62 seed stores in the district each under the charge of an assistant agriculture inspector. The assistant agriculture inspectors are assisted by 84 *kamdars*.

For the development of groundnuts and other oil-seeds there are 8 assistant agriculture inspectors; the work of extension and development of cotton is supervised by a cotton development inspector; a jute development inspector is also posted at Landhaura.

For plant protection work there are a plant protection officer and 33 junior plant protection assistants manning the fifteen plant protection centres in the district. A tahsildar (agriculture) assists the district agriculture officer in looking after the work of *taqavi* loans advanced for agricultural purposes. At Dhanauri, situated between Roorkee and Bahadurabad, there is a government agriculture farm, supervised by a farm superintendent.

Three soil conservation officers are also posted, one each at Saharanpur, Chhutmalpur and Roorkee under the deputy director of soil conservation at Meerut. Each soil conservation officer is assisted by a technical assistant, two junior engineers, five soil conservation inspectors and 25 assistant inspectors. The unit undertakes the land reclamation and soil conservation work under the various programmes of minor irrigation, contour bunds, afforestation, etc.

The department has a wide range of activities. Its functions, broadly speaking, are to increase food-grains resources, to develop by intensifying cultivation and preventing losses to crops, sources of supply of protective food, such as fruits and vegetables, by extending the area under cultivation; to impart training and education for improved methods while carrying on research into agricultural problems of practical importance, and to prevent soil erosion.

The activities of the department have resulted in increasing food production by 60 per cent since the inception of the First Plan.

Horticulture

The horticultural unit works under the administrative control of the district agriculture officer. In technical matters it is guided by the superintendent, government gardens, Meerut, who also controls the funds meant for horticulture schemes which are utilised by the district agriculture officer. The superintendent works under the deputy director of horticulture, Meerut region.

The horticulture unit consists of a senior horticulture inspector, a district horticulture inspector, a vegetable inspector, an assistant horticulture inspector, a head *chowdhry* and two *malis*.

The inspectors function as technical assistants to the district agriculture officer in the implementation of various horticulture schemes and schemes relating to vegetables and potatoes.

There is also a government horticulture research institute at Saharanpur which conducts research work on various aspects of horticulture for the western part of Uttar Pradesh.

ANIMAL HUSBANDRY DEPARTMENT

A district live-stock officer is responsible for supervision of all animal husbandry activities in the district and implementation of the related programmes. The activities comprise improvement in breed of cattle and poultry, prevention and treatment of their diseases and control of epidemics among them. He is assisted by an artificial insemination officer.

In the field the district live-stock officer is assisted by 19 veterinary assistant surgeons, a veterinary officer and two assistant development officers (animal husbandry). The animal husbandry programmes are carried out through 24 veterinary hospitals, 14 of which have artificial insemination centres also.

The district live-stock officer works under the overall supervision of the deputy director of animal husbandry, Meerut circle, Meerut, for the technical side of his work. Locally he works under the additional district magistrate (planning).

The main function of this department is to improve cattle breeds, prevent cattle diseases and to provide a fillip to live-stock industries like poultry and piggy farms.

The department has extensive veterinary services and artificial insemination centres for improving breeds of cattle.

CO-OPERATIVE DEPARTMENT

The assistant registrar, co-operative societies, who has his headquarters at Saharanpur, is responsible for the co-operative movement in the district. He exercises control over the co-operative staff and institutions. He is assisted by the assistant registrar, co-operative societies (recovery), 3 additional district co-operative officers and a senior accounts inspector. There are 16 assistant development officers (co-operatives), one in each development block, to look after the work of co-operative societies. There are 6 co-operative inspectors (marketing), one for each of the six co-operative marketing societies in the district. The work of agriculture co-operative societies is supervised by the co-operative supervisor (farming) and Gram Sewak (farming). The assistant registrar works under the deputy registrar, co-operative societies, Meerut region, Meerut.

The main functions of the department are to encourage and register new co-operative societies, to supervise the working of co-operative banks, societies, unions and federations, and to co-ordinate activities of various development departments.

EDUCATION DEPARTMENT

The district forms part of the Meerut region which is in the charge of the deputy director of education, Meerut, and for girls' education in that of the regional inspectress of girls' schools. In the district the district inspector of schools is responsible for the supervision, control and inspection of educational institutions up to the higher secondary stage. He is assisted by an associate district inspector of schools, a deputy inspector of schools and a deputy inspectress of girls' schools, the latter being in charge of girls' education up to the junior high school stage and being assisted by 9 assistant inspectresses. The deputy inspector of schools also advises the local bodies and aided institutions up to the junior high school stage and is assisted in his work by 20 sub inspectors of schools.

The Sanskrit *pathshalas* and the Urdu medium primary schools are respectively under the overall charge of the assistant inspector, Sanskrit *pathshalas*, and the deputy inspector, Urdu medium schools, Meerut region both having their headquarters at Meerut.

Since 1972 a district Basic education officer has been functioning to supervise all primary institutions in the district. He also wields control over the staff of these institutions excluding those serving under the municipal boards.

FOREST DEPARTMENT

The district falls in the Dehra Dun forest division under a divisional forest officer, Dehra Dun. He is assisted by an assistant conservator of forests with headquarters at Dehra Dun and by a subdivisional officer, with headquarters at Hardwar. There are two range officers, at Hardwar and Mohand. The Hardwar range is divided into 6 sections and the Mohand range into 4, each section being under the charge of a forester. The sections are further subdivided into beats, under a forest guard. Hardwar range had 17 beats and Mohand range 12 beats.

There is a forest research centre at Ranipur founded in 1968, manned by a research range officer and a forester.

The chief objects of this department are to preserve and improve the existing forest areas, afforest waste lands and to enhance the productivity of the forests. Preservation of wild life has also assumed significant importance now.

INDUSTRIES DEPARTMENT

To look after the work relating to promotion and regulation of industries, a district industries office was established at Saharanpur in 1956. A rural industries project office was established at Deoband at the end of 1962. Its activities were confined to a limited area only but in 1972 the whole district became the project area and the two offices were merged and a combined office came into existence at Saharanpur, known as "Office of the Deputy Director of Industries, Saharanpur". The deputy director of industries who is the principal organiser of all the industrial development programmes and motivator of entrepreneurs in the district, is assisted by the district industries officer and a planning-cum-survey officer whose duty is to carry out an industrial survey of the district to find out the availability of resources, their present utilization and to plan a balanced development of the different categories of industries in the district. There are 2 technical officers for the preparation of project reports and for imparting guidance to entrepreneurs in different branches of industries, viz., mechanical engineering, electrical, chemical and ceramics. Three industrial promotion officers are posted in the district for the implementation of industrial programmes and the motivation of entrepreneurs in the area of 3 or 4 development blocks allotted to each.

There is also an area development officer (industries) at Roorkee with a staff consisting of a survey officer, a senior investigator, 2 junior investigators and 4 industrial inspectors and with jurisdiction over the area comprised by

Roorkee, Hardwar and Rishikesh, for the intensive development of small-scale industries and expansion and diversification of industrial activities in the areas.

IRRIGATION DEPARTMENT

The district has the unique distinction of housing the first irrigation office of the State at Saharanpur which was opened as far back as the year 1823 for remodelling of the old Mughal Canal on the left bank of the Yamuna. It also has the privilege of having the first engineering institute of the State at Roorkee to solve, primarily, the increasing problem of design and construction of dams, barrages, power houses and other works in the post-war period. It was established in 1946-47 at Kankhal and shifted to Roorkee in 1949.

The department is headed by an engineer-in-chief, with headquarters at Lucknow, and its activities spread over canals, tube-wells, lift irrigation and minor irrigation.

Canals

The district falls in I circle, irrigation works under a superintending engineer at Meerut. The circle is comprised of the upper division, eastern Yamuna canal and the northern division, Ganga canal. Each division is under an executive engineer, with headquarters at Saharanpur and Roorkee respectively. The executive engineer at Saharanpur has under him the whole of Saharanpur district except Roorkee tahsil between the doab of Hindan and Ganga rivers and a part of Muzaffarnagar district. He is assisted by three assistant engineers, designated subdivisional officers, two of whom have headquarters at Saharanpur and the third at Kalsi. Each subdivisional officer is assisted by three to four junior engineers, each supervising a section under him. A junior engineer is also attached to the divisional office for project work.

The northern division, Ganga canal comprises Roorkee tahsil only of the district Saharanpur besides some areas of district Muzaffarnagar. The executive engineer is assisted by two assistant engineers and nine junior engineers. The division is mainly responsible for the proper maintenance of the head works of the Ganga canal and of the canal itself up to 83.6 km. from its source. It also undertakes the work of construction of temporary bridges during the Kumbh and *Ardh* (half) Kumbh fairs.

Tube-wells

The tube-well division of the department falls under the tube-well circle, Meerut, headed by a superintending engineer, with headquarters at Meerut. At the district level the division is under the charge of an executive engineer at Saharanpur, who also has a part of Dehra Dun and Muzaffarnagar districts under him. The executive engineer is assisted by 3 assistant

engineers and 10 junior engineers. The division constructs the State tube-wells and maintains the lined and unlined *guls*, etc., to provide irrigational facilities to cultivators.

Minor Irrigation

Another office of the department, at the district level, is that of the assistant engineer, minor irrigation, Saharanpur who works under executive engineer with headquarters at Meerut who in turn is subordinate to the superintending engineer, rural manpower and minor irrigation, U. P. with headquarters at Lucknow. The assistant engineer is assisted by a senior mechanical inspector and a mechanical inspector.

The unit undertakes works connected with construction of tube-wells, installation of pumping sets, boring, providing loans to cultivators and assisting in the rural electrification programme.

U. P. Irrigation Research Institute

The institute was established in 1946-47 at Kankhal and a large number of irrigation and power schemes were taken up soon after Independence in 1947. In 1949 it was shifted to Roorkee and raised to a full-fledged irrigation research institute with two divisions under the charge of a director of the rank of superintending engineer. It has now eight divisions, each under the charge of a research officer excluding the administrative division which is under the charge of an executive engineer.

Public Works Department

The district falls in 24th circle of the department under a superintending engineer with headquarters at Saharanpur. The chief engineer at Lucknow is the head of the department at the State level. The district is comprised of provincial division, Saharanpur, and temporary division, Roorkee, each division being under the charge of an executive engineer. The jurisdiction of the provincial division extends over tahsils of Saharanpur, Nakur and Deoband while the temporary division covers the tahsil of Roorkee only. The executive engineer, provincial division, is assisted by five assistant engineers, 18 junior engineers, a superintendent, electrical and mechanical and a computer while the temporary division, Roorkee, has 3 assistant engineers and 6 junior engineers.

There is also a departmental construction division, Hardwar, mainly for the construction of roads near Hardwar. The division is under a subdivisional officer assisted by two junior engineers.

The department is responsible for execution and supervision of the works of construction and maintenance of roads, bridges, etc., and buildings of the State government.

CHAPTER XIV

LOCAL SELF-GOVERNMENT

The historical account given in chapter II of this volume testifies that Saharanpur was successively ruled by the Panchalas, Mauryas, Guptas, Maukharis and other Hindu rulers before it came under the sway of Muslims. The Hindu kings, by and large, endeavoured to give considerable autonomy to local institutions like panchayats, and functionaries like Gramika (village headman) and Gramyavadin existed in their rule. In this context it is reasonable to believe that viable units of self-government functioned in the villages and towns for a long time till under the Muslim rule they became obscure for want of State patronage. In the absence of any records it is not possible to delineate exactly the rise and fall of these institutions in Saharanpur district from the earliest times. However, the growth of local bodies after the British occupation of the district in 1803, may be traced with accuracy on the basis of material contained in earlier gazetteers.

The earliest beginning in the field of local self-government in the district was made when Regulation XXII of 1816 was passed and was enforced in Saharanpur town, providing for the establishment of a fund from the tax on lands and houses to maintain a regular police force. From 1837, the savings from this tax were also utilised in town improvement, and non-official committees were appointed to supervise this work.

In the year 1856, the Bengal Chowkidari Act, (Act XX of 1856) was passed by the government to make better provision for watch and ward "of cities, town stations, suburbs and bazars of the Presidency of Fort Williams". Places to which the provisions of the above Act were applied were commonly called Act XX towns. After determining the amount of money needed to each town to maintain chowkidars for doing watch and ward duties, the residents were required to pay a tax on the basis of circumstances and property. The district magistrate appointed a committee of three to five members for each town from among its citizens, for a term of one year. If funds permitted, the committee could also take up sanitation and general improvement of the town.

In 1860, there were 18 towns in the district to which the provisions of Act XX of 1856 were applied on 25th May, 1860. These were Ambahta, Bhagwanpur, Chilkana, Deoband, Gangoh, Hardwar, Jabarhera, Jwalapur, Kankhal, Lakhnauta, Manglaur, Nakur, Nanauta, Rampur, Roorkee, Saharanpur, Sultanpur and Sarsawa. Later on, Titron was added to the list in 1868. Subsequently, the town of Saharanpur, was upgraded as a municipality on

21st December, 1867 followed by Deoband on 27th January, 1868 under Act XXVI of 1850. The towns of Hardwar, Kankhal and Jwalapur were amalgamated into one municipality on 25th May, 1868. This left only 13 towns to which Act XX of 1856 continued governing. In 1870 Libarheri was united with Manglaur to form a single area, while Sultanpur and Chilkana were similarly combined, thus, bringing down the number of Act XX towns in the district to twelve. The subsequent alterations were the extension to Lakhnauta in 1871, so as to embrace the adjoining village of Sankraur, and the enforcement of the Village Sanitation Act 1892, which provided for allocation of funds and for better sanitations in the rural towns governed under Act XX of 1856. The year 1908 saw the detachment of Libarheri from Manglaur thus, leaving only Manglaur as an Act XX town.

In 1914, the Bengal Chowkidari Act (Act XX of 1856) was repealed and was replaced by a more comprehensive Act, known as the U.P. Town Areas Act, 1914 which converted all the Act XX towns into town areas.

An important provision of this Act was to relieve the town area committees of watch and ward duties and to make them responsible for arrangements with regard to basic civic amenities like water-supply, construction and maintenance of roads, street lighting and sanitation in the towns. This Act was enforced in the district on 1st April, 1914 and ten towns of the district, viz., Ambahta, Chilkana-Sultanpur, Gangoh, Nanauta, Nakur, Manglaur, Jabarhera and Rampur, Sarsawa and Titron were constituted as town areas. Ever since then, this Act as amended from time to time governs these town areas and others constituted at later dates. Their brief account is given separately in this chapter. Similarly the old Municipalities Act of 1883 was repealed by the passage of the U.P. Municipalities Act (Act II of 1916), and towns of Saharanpur, Roorkee, Deoband and Hardwar came under its jurisdiction.

This Act provided for the elections of the president directly by the people and separate electorates for Muslims and non-Muslims were also opened. Ever since that date, this Act as amended with the passage of time governs these municipalities and certain other municipal towns and notified area constituted at later dates. Their history is given under their respective heads.

The nucleus of a district body for self-government was formed as early as the year 1838 when the administration of local funds and affairs began with the institution of a *dak* cess in 1838 for the requirement of the district post, and this was followed by the imposition in 1840, of a road cess. This cess was administered by a local committee and subsequently other committees were also formed for the management of dispensaries and educational institutions. These were amalgamated into a

district committee in 1871, with the passing of North-West Provinces and Oudh Local Rates Act, 1871 and no further change was made till the constitution of the district board under the Local Boards Act, (Act XV of 1883). A further modification was effected in 1906 when the board was invested with more powers and the old local or tahsil boards were abolished, the members being elected directly from each tahsil. The board at that time consisted of 17 members including the magistrate as chairman, the four subdivisional officers and three persons elected from each tahsil.

In 1922, the U.P. District Boards Act extended the territorial jurisdiction of a district board to the whole of rural area and it continued to be in force till the passage of Antarim Zila Parishads Act of 1958 which converted the district board into the Antarim Zila Parishad. The body at present known as the Zila Parishad was established in 1963, under the U.P. Kshettra Samitis and Zila Parishads Adhiniyam, 1961. Its term was extended by the government pending a review of their constitution and functions, and by the U.P. Kshettra Samitis and Zila Parishads Ordinance promulgated on March 23, 1970, the powers and functions of the Zila Parishad were vested in the district magistrate till the elections were held again. A brief account of the local bodies functioning in the district is given in the following paragraphs.

There were six municipalities of Saharanpur, Hardwar, Deoband, Roorkee, Manglaur and Gangoh in the district in 1972. After 1947, the principle of direct election of the members of the municipal boards has been fully put into practice. The system of nomination of members, whether officials or otherwise, and communal representation is now a thing of the past. The last municipal elections were held all over the State in June-July, 1971. The municipal board comprises of members the number of which varies in accordance with the area and population of the municipal town. The members elect the president and the term of office of members and president is normally five years. The members have power to oust the president through a vote of no-confidence and elect a new president.

The income of the municipal boards is mainly derived from tax on vehicles and hackney carriages, octroi, toll, rent of municipal property and government land (*nazul*) managed by the board, sale proceeds of water and grants and loans from the government. The main heads of expenditure are general administration, collection charges of taxes and other dues, water-supply, street lighting, construction and maintenance of town streets, roads and other public works, education, public health and sanitation.

Saharanpur

The municipality covers a total area of 25.25 sq. km. and its population according to the census of 1971 was 2,25,396. At the time of the last municipal elections in 1971, the town was divided into 14 wards which elected 38 members through adult franchise.

Water-supply—The water-supply scheme of the municipal board was completed in 1956. A number of tube-wells have been constructed and the total storage capacity of the tanks is 19,35,000 litres. There is a waterworks engineer and two pipe-line inspectors to assist him. During the year 1971-72 the total quantity of water supplied in the town was 5,31,00,24,400 litres, which comes to nearly 72 litres of water per head per day. Water is supplied all the 24 hours in the town. There were 8,432 private and 450 public water taps in the city in that year and the total length of pipe-lines in the town was 3,566 metres. The board spent a total sum of Rs 2,85,361 on the water-supply arrangements in 1971-72.

Street Lighting—Electricity was made available in the town in 1923, prior to which kerosene oil lamps were used for providing street lights in the town. Nearly all the roads and lanes in the city have now been provided with electric lamps, the total number of electric lamps on the roads and streets in 1971-72, being about 10,000, the important road crossings and public places having been provided with mercury vapour electric lamps numbering 79. The board incurred an expenditure of Rs 2,38,000 in 1971-72 under this head.

Public Health and Sanitation—The board maintained three dispensaries, one allopathic, one Ayurvedic and one Unani in 1971-72. Facilities for the treatment of infectious diseases were also available in the town.

For the purpose of sanitation and maintaining conservancy services in the town the board had two chief sanitary inspectors, eight sanitary inspectors, 904 sweepers and 113 *bhisties* and other staff in 1971-72. The town had pakka drains having a length of 1,40,818 metres and kutcha drains measuring nearly 18,288 metres. Those which are pakka are cleaned daily. Part of the town has been provided with underground sewers and efforts are being made to cover the whole town with such sewers in the near future. The sullage is sold to cultivators for being used as compost. The board also provides vaccination facilities and for that purpose it had under it, eight vaccinators. The total expenditure of the board on these activities in 1971-72 amounted to Rs 21,50,000.

***Education**—The board was running 51 junior Basic schools for boys and 29 for girls in the town in 1971-72, the senior Basic schools for boys

* The Basic education institutions managed by the local bodies in the State have been taken over by the State government with effect from July 25, 1972. A Basic Shiksha Adhikari has been appointed in the district to look after the newly enforced scheme

and girls being 4 and 3 respectively. A sum of Rs 12,45,500 was spent by the board on education in 1971-72.

In order to relieve the housing shortage in the city, the municipal board has constructed a number of houses under the middle-income group housing scheme and has prepared schemes for constructing more houses for the low-income group and the slum clearance programme. The board is also maintaining a number of public parks in the town.

Hardwar

At the time of the last municipal elections in June-July, 1971 the municipal area was divided into 10 wards which elected a total number of 21 members through adult franchise. The total area covered by the municipality was 11.07 sq. km. and its population 79,277 according to the census of 1971.

Water-supply—The municipal board completed the water-supply scheme for the town in 1927. Water was obtained from tube-wells and the overhead tanks had a storage capacity of 37,95,880 litres. The water-supply scheme was reorganised in 1966 and three new overhead tanks and five tube-wells were constructed for the purpose. New pipe-lines were also laid to cover more areas in the city. In 1971 there were 4,536 private and 460 public water taps in the town with water being available all the 24 hours. The board spent a sum of Rs 10,26,637 in 1971-72, on the water-supply arrangements. The municipal board has an engineer and other staff under him to look after these arrangements.

Street Lighting—Electricity was made available in the town in 1927. All the roads and streets and other public places like the *ghats* on the banks of the Ganga are provided with electric lamps which numbered 2,021 in 1971. The board had spent Rs 14,21,053 on lighting arrangements in 1970-71.

Public Health and Sanitation—The municipal board had one Ayurvedic and two allopathic dispensaries in 1971. Facilities for the treatment of infectious diseases was also available at the allopathic dispensary.

For looking after the work of sanitation and maintaining conservancy services, the municipal board had under its employment four sanitary inspectors and a number of sweepers and other staff in 1971. Sullage is carried by pakka drains, measuring nearly 1,45,694 metres in 1971. Only a few areas had kutchha drains which totalled a length of about 5,181.6 metres. Those that are pakka are cleaned daily.

Education—The municipal board maintained 21 junior Basic schools for boys and 23 junior Basic schools and two senior Basic schools for girls before their management was taken over by the Basic Shiksha Parishad in 1972. One higher secondary school for boys and two intermediate colleges one each for girls and boys were also maintained by the board in 1971. A total sum of Rs 8,87,260 was spent by the board on education in 1970-71.

The board has recently laid out a beautiful park named as Hasanand Roopchand Park on Lalta Rao road and it has plans to construct a rope-way up to Mansa Devi temple on the hill nearby.

Deoband

The total area covered by the municipality was 7.9 sq. km. and the population 38,194 according to the census of 1971. During the municipal elections held in June-July 1971, the town was demarcated into 8 wards which elected 17 members of the board on the basis of adult suffrage.

Public Health and Sanitation—For providing sanitation and maintaining conservancy services in the town the municipal board had under it, one sanitary inspector, one food inspector, six sanitary *jamadars*, 79 sweepers and 25 *bhisties* during the year 1972-73. The board also had tractor driven carts and hand carts for removing garbage. There was a vaccinator for providing vaccination service to the people. The total length of the kutchra and pukka drains in the town is 10 km. and 40 km. respectively.

Street Lighting—Electricity was made available for the first time in the city in the year 1934 and since then the board has installed electric lamps for lighting the roads, streets and public parks in the town. There were 600 electric lamps, 60 kerosene oil lamps in the town in the year 1972-73. Electricity is supplied by the U. P. State Electricity Board. The municipal board spent a sum of Rs 20,060 on street lighting during the year 1972-73.

Roorkee

The total area covered by the municipality in 1970-71 was 7.74 sq. km. and its population 47,561. During the municipal elections held in June-July 1971, the town was demarcated into nine wards which elected 18 members on the basis of adult suffrage.

Water-supply—The municipal board has its own water-supply arrangements commissioned in 1951. There is a tank with a storage capacity of 4,54,596 litres of water. In 1971-72 the total length of pipe-lines in the city was 11.6 km. and the total quantity of water supplied by the waterworks amounted to 53 litres per head per day, the number of public water taps was 87 and that of private ones 2,216. The board spent a sum of Rs 81,140 on water-supply arrangements in the town in 1971-72. The municipal board has undertaken the reorganisation of its water-supply envisaging laying of pipe-lines in a number of new localities like railway station, Ganeshpur, Sheikhpur, Azadnagar, Sukhdeonagar and Nehrunagar.

Street Lighting—Electricity was made available for the first time in the city in the year 1929 and since then the board has installed electric lamps for lighting the roads, streets and public parks in the town. There were

2,236 electric street lamps in the town in 1971-72 and the board incurred an expenditure of Rs 91,512 under this head in that year.

Public Health and Sanitation—For providing sanitation and maintaining conservancy services in the town the municipal board has under it two sanitary inspectors, 163 sweepers and four *bhisties* in 1971-72. The length of pakka drains in the town is 175 km. and they are flushed daily by the sweepers. Underground sewerage has been completed in a few localities and it is proposed to cover more areas in the near future. The board also manages a sewerage farm.

For providing vaccination facilities to the residents the board has two vaccinators under it. The expenditure incurred by the board on public health and sanitation activities totalled Rs 3,54,939 in 1971-72.

Education—In 1971-72, there were 11 junior Basic schools for boys and 8 for girls which were maintained by the municipal board while the number of such schools which were managed privately and received financial aid from the board was 5 for boys and 3 for girls. There were two senior Basic schools, one each for boys and girls, which were managed by the board. A private senior Basic school for girls also got aid from the municipal board in that year. The board spent a sum of Rs 2,32,052 on education in 1971-72. Management of junior and senior Basic schools run by the board has since been taken over by the Basic Shiksha Parishad.

The board also maintains three parks, a children's play centre and a library in the town. A sports stadium has also been constructed in the city by the board.

Manglaur

Prior to its constitution as a municipal board in 1950, Manglaur was administered as a notified area. By 1971, the total area covered by the municipality was 1.32 sq. km. and its population 19,723 the town being divided into six wards having 16 members elected through adult franchise.

The town got electricity in the year 1939-40 and since then the streets of the town are provided with electric lamps in addition to kerosene oil lamps. There were 205 electric lamps and 159 kerosene oil lamps for this purpose in 1971-72 and the board spent a sum of Rs 20,669 on street lighting.

For the purpose of sanitation and maintaining conservancy services in the town the municipal board had a sanitary inspector, 48 sweepers and 8 *bhisties* and it spent a sum of Rs 92,806 on public health and sanitation in 1970-71.

For providing education facilities in the town the board maintained 8 junior Basic schools for boys, 5 junior and two senior Basic schools for girls till their administration was taken over by Basic Shiksha Parishad. It

also provided financial aid to one more such institution which is being run privately. The total expenditure of the board on education was Rs 1,08,038 in 1970-71.

Gangoh

In 1971, the total area covered by this municipality in 1971 was 7.12 sq. km. and its population 24,300. At the time of the last municipal elections held in 1971, the town was divided into six wards and 16 members were elected from them through adult franchise. The town is electrified and the board manages the street lighting. There were 276 electric street lamps and 25 electric tube-lights and 25 kerosene oil lamps in 1971-72 and the streets, roads and public places were lit by them.

For the purpose of keeping the town clean and maintaining conservancy services the board had a sanitary inspector and 70 sweepers and other staff. In 1971-72 the board spent a sum of Rs 66,994 on these activities. The pakka drains, measuring nearly 9 km. are flushed daily.

Notified Area—Ranipur

Ranipur was declared a notified area in 1963 under the provisions of the U. P. Municipalities Act, 1916. The population of the town according to the 1971 census was 14,000 distributed over an area of 26.83 sq. km. Electricity and water-supply are maintained by the Bharat Heavy Electricals Ltd. A committee of 7 elected members has been administering the town since 1968.

TOWN AREAS

In 1973, there were eleven town areas in the district—Ambahta, Behat, Chilkana-Sultanpur, Jabarhera, Landhaura, Nakur, Nanauta, Rampur-Maniharan, Sabreda, Sarsawa and Titron.

There is a committee in each town area which consists of ten to fifteen members including a chairman, all elected by the residents of the town on the basis of universal adult franchise for a term of four years. The government has power to extend or curtail this term for the purpose of holding fresh elections or in other special circumstances. Any member or the chairman may also be removed by the government, before the completion of the term, for dereliction of duty or abuse of power. The term of the town area committees expired in November, 1970 and the district magistrate took over the administration of these local bodies. In June-July, 1971, however, fresh elections were held and they were restored to the popular control of the elected town area committees.

Tax on houses, land and water, sale of refuse and compost, fines, rents from town area property, and loans and grants received from government constitute the principal sources of income of these local bodies.

Ambahta

Ambahta was reconstituted a town area in 1953. According to the census of 1971 its population was 6,098 and it covered an area of 0.81 sq. km. The last elections to the town area were held in 1971 and 9 members were elected for a term of four years. Electricity became available in the town in 1961-62 and by the year 1972-73, the committee had installed 72 electric street lamps and 25 kerosene oil lamps for lighting the roads and thoroughfares. The committee also maintains its own water-supply arrangement, the waterworks scheme having been completed in the year 1967 with a total length of 4,348 metres of pipe-lines laid and 265 public and private water taps. The total expenditure incurred on this account was Rs 6,892 in the year 1972-73.

Behat

The place was constituted a town area in 1936. It had an area of 1 sq. km. and a population of 7,179 according to the census of 1971. There is no electricity in the town and the committee makes arrangement for lighting the streets and lanes by means of kerosene oil lamps, which numbered 92 in 1971-72, a sum of Rs 4,000 being spent for this purpose.

Chilkana-Sultanpur

The area of the town was 6.25 sq. km. and the population 6,742 according to the census of 1971.

The town was electrified in 1966 and the committee makes arrangement for the lighting of the streets. There were 107 electric street lamps and 26 kerosene oil lamps in the year 1972-73. A sum of Rs 3,400 was spent by the committee in 1972 on street lighting. The town area has drawn up a water-supply scheme and work on it is to be taken up soon.

Jabarhera

This town area was constituted in the sixties of the present century. It covered an area of 1 sq. km. and had a population of 5,000 according to the census of 1971. Electricity became available in the town in 1963. The town area committee had installed 109 electric street lamps in the town by 1971. There were also a few kerosene oil lamps in some lanes in the town. The committee spent a sum of Rs 2,000 on street lighting in 1970-71.

Landhaura

This town was upgraded to a town area in 1973 and has been divided into ten wards, one member to be elected from each and one seat being reserved for a Scheduled Castes candidate. It had a population of 6,290 and an area of 6.22 sq. km. in 1971.

Nakur

It had an area of 0.26 sq. km. and a population of 8,370 according to the census of 1971. The town area committee has drawn up a scheme of water-supply for the town. The place got electricity in 1957 and there were 45 electric street lamps in 1971-72 and the committee incurred an expenditure of Rs 4,000 on street lighting.

Nanauta

It had an area of 2 sq. km. and a population of 7,965 according to the census of 1971. The committee maintains its own water-supply arrangements, there being 100 water taps in the town in 1971-72. The town was electrified in 1966 and by 1971 the committee had installed 37 electric street lamps for lighting the thoroughfares, some of the lanes are still lighted by means of kerosene oil lamps which numbered 37.

Rampur-Maniharan

It had an area of 1.45 sq. km. and a population of 12,997 according to the census of 1971. The town area committee has drawn up a water-supply scheme for the town. Electricity became available in the town in 1933 and the committee makes arrangements for the lighting of streets and lanes by means of electric lamps and kerosene oil lamps. In 1972-73 the number of lamps lighted by electricity was 109 while those lighted by kerosene oil numbered 78. A sum of Rs 4.634 was spent on street lighting.

The committee contributes daily newspapers to one of the private libraries named Janata Pustakalaya in the town.

Titron

The town covered an area of 0.98 sq. km. and a population of 5,990 according to the census of 1971. Its water-supply scheme was completed in 1967; the total number of public water taps was 22 and those of private taps 76 in 1971. The town got electricity in 1962-63 and since then the town area committee has been installing electric street lamps for lighting the thoroughfares, the number having reached 73 in 1971.

Sarsawa

The area of the town was 0.288 sq. km. and the population was 4,697 according to the census of 1971.

The water-supply scheme in the town was completed in the year 1968, and the total length of the pipe-line was 4,593.336 metres in 1972-73. The town had 188 private and 23 public water taps.

Electricity was made available to the town in 1964. The committee makes arrangements for the lighting of the streets in the town. There were

66 electric street lamps for the purpose in 1972-73. A sum of Rs 1,569 was spent in 1972-73 on street lighting.

PANCHAYATI RAJ

In ancient times, the panchayats which used to be the bodies of village elders, exercised administrative and judicial powers over the community. With the advent of Muslim rule these self-governing units lost their importance considerably but they were allowed to exist till such time they did not come into conflict with the superimposed Muslim system of law and order in villages.

During the British rule these panchayats lost their residual importance though they continued to survive and control the social life of the village. But the alien rulers soon realised that they could not do away with these traditional institutions and they gave some encouragement to them by recognising their importance. But these panchayats lost their traditional feature and the new panchayats created under the U.P. Gram Panchayat Act, 1920, had a blend of the traditional and the western features which were meant to be suited to the British.

The first real beginning in this direction was only made in the year 1947, when after the independence, the U. P. Panchayat Raj Act, 1947 was passed and the Act was applied to Saharanpur district in 1949 and Gaon Sabhas and Gaon Panchayats started functioning in this district. It reorganised the ancient system on the modern pattern of elected *gaon* panchayats and delegated to them adequate powers for the administration of village.

The national extension blocks which were envisaged for community development started coming into being gradually from 1957. They had block development committees which were advisory bodies, set-up to help and advise the staff posted in the blocks for speedy implementation of the Five-year Plan schemes. The government transformed their structure by enacting the U. P. Kshettra Samitis and Zila Parishads Adhiniyam, 1961 and these *samitis* (committees) became statutory bodies with wide executive and financial powers. With the passing of this Act, the three tier organisation viz. *gaon* panchayats at the base, the *kshettra samitis* in the middle and the Zila Parishad at the apex was introduced.

Zila Parishad

The Zila Parishad was established in 1963, under the U. P. Kshettra Samitis and Zila Parishads Adhiniyam 1961; its term was extended by the government pending a review of their constitution and functions, and by the U. P. Kshettra Samitis and Zila Parishads Ordinance promulgated on March 23, 1970, the powers and functions of the Zila Parishads were vested in the district magistrates till the elections are held again.

The functions of the Zila Parishad briefly are, co-ordination of activities of *vikas khands* (development blocks), implementation of inter-block scheme and utilisation of funds allotted by the government for the purpose of agriculture, animal husbandry, irrigation, co-operation, village industries, public health, education, construction as well as repair of roads, bridges and ferries, cultural activities and welfare of children, youth and women.

The principal sources of income of the Parishad are taxes, licence fees, market tolls, rents from property, and grants and loans from the government. It spends most of it on public health services, schools, and public works like construction and maintenance of roads, bridges and ferries.

To carry out its various functions, the Zila Parishad is required to constitute six statutory committees called the Karya (executive), Vitta (finance), Shiksha (education), Sarvajanik Nirman (public works), Jan Swasthya (public health) and Niyojan (planning) Samitis.

Education—Institutions up to the senior Basic stage (junior high school) were under the control of the Zila Parishad till July 25, 1972 when they were taken over by the government. There were one deputy inspector and 21 subdeputy inspectors of schools for the supervision of boys' schools in 1971. For the supervision of girls' schools there were one deputy inspectress and nine subdeputy inspectresses. The total number of junior Basic schools both for boys and girls maintained by the Parishad was 985 in 1971. Those that received financial aid from the Parishad numbered 47. Senior Basic schools of the Parishad for boys and girls numbered 103 in 1971. Only one such institution was given aid by the Parishad in that year. The Zila Parishad spent a sum of Rs 49,69,715 on these schools in 1970-71.

Medical and Public Health Services—Eight allopathic, seven Ayurvedic and four Unani dispensaries were maintained by the Zila Parishad in the district in 1971. Two maternity centres were also under the Parishad in that year. The dispensaries and other public health activities are supervised by the district medical officer of health (now redesignated as deputy chief medical officer of health). There is a sanitary inspector in each of the development blocks, one superintendent of vaccination and 16 vaccinators under him. The total expenditure incurred by the Parishad on medical and public health activities was Rs 1,84,260 in 1970-71.

Public Works—The Zila Parishad had under its management nearly 37 km. of metalled and 352 km. of unmetalled roads in the year 1972.

Kshettra Samitis

With the enforcement of the U. P. Kshettra Samitis and Zila Parishad Adhiniyam, 1961, functions that were previously carried out by the bloc

development committees were taken up by the Kshettra Samitis constituted in 1963. The number of these Samitis was 16 in 1973 one for each development block. The term of the Kshettra Samitis is normally five years but can be shortened or extended by the government. The block development officer acts as the executive officer of the Kshettra Samiti, which is responsible for formulation and execution of the development plans of the Gaon Sabhas relating to agriculture, horticulture, live-stock, fisheries, minor irrigation works, opening of health, maternity and child welfare centres, prevention and control of epidemics, promotion of village industries and co-operative institutions. The Samiti mainly acts as a co-ordinating agency for the Gaon Sabhas functioning within its jurisdiction in the implementation of schemes and programmes.

Gaon Panchayats

Statutory provision for the establishment of panchayats in the villages of this district was made in 1921 by enforcing the U. P. Village Panchayats Act, 1920 (Act VI of 1920). The idea of having statutory panchayats in the villages was welcomed generally, although it excited suspicion and distrust in some places where the zamindars were afraid of their influence being undermined. Care was taken to select only those villages where the panchayats were likely to thrive. The personnel of the panchayats was formed on a representative and elective basis. In 1922, there were 130 panchayats working in the district. Under the U. P. Panchayat Raj Act, 1947 (enforced in the district in 1949) 625 village panchayats were constituted. After some reorganisation, the number of such bodies rose to 1,247 after the fourth general elections for these village bodies in May-June, 1972. All the adults of a village or group of villages, with a minimum population of 250 persons, constitute the *gaon sabha* and the members of the *gaon* panchayat which is the executive body, is elected by them. The members of the *gaon sabha* elect a *pradhan* (president) and the *up-pradhan* (vice-president) is elected by the members of the *gaon* panchayat from amongst themselves, each for a term of five years. They are also ex-officio *pradhans* and *up-pradhans* of the *gaon* panchayats and have the right to speak and take part in the proceedings of the panchayat. The *pradhan*, is not deemed to be a member of the *gaon* panchayat and is not entitled to vote except in case of a tie, when the *pradhan* has the casting vote.

The functions of the *gaon* panchayat include construction, repairs, cleaning and lighting of streets, sanitation and prevention of epidemics, maintenance of buildings, land or other property belonging to the *sabha*, registration of births and deaths, regulation of markets and fairs, provision for drinking water and welfare of children and youth and women.

For the fulfilment of these objectives, the *gaon* panchayats largely depend on voluntary contributions and government grants. Their powers

to levy taxes, rates and fees to augment their resources for fulfilling their roll as effective instruments of change and rural reconstruction at the grass roots, have been extended by an ordinance promulgated by the governor of Uttar Pradesh in the month of November, 1972. They may now levy a tax on land, not exceeding 25 paise in a rupee on the amount of the land revenue, to be paid by the actual cultivator or the tenant whatever the case may be. The ordinance also empowers *gaon sabhas* to borrow money from the State government, any financial corporation, scheduled banks, Uttar Pradesh Co-operative Bank or district Co-operative Bank to carry out its programmes and activities of rural reconstruction. The statement given below indicates the amount of taxes realised by the *gaon* panchayats in the district from the year 1968-69 to 1971-72 :

Year	Income from taxes (Rs)
1968-69	2,31,679
1969-70	2,65,691
1970-71	1,85,565
1971-72	2,02,048

The total income and expenditure of the *gaon* panchayats in the district during the year 1972-73 was as under :

Income (Rs)		Expenditure (Rs)	
Taxes realised	1,98,311-00	Construction works	3,28,125-00
License fees	2,300-00	Other heads	2,05,469-00
Grants	40,615-00		
Other heads	6,98,506-00		
Total	9,39,732-00	Total	5,33,594-00

Some of the main achievements of the *gaon* panchayats of the district during the first three Plan periods and from the year 1966-67 to 1971-72 are as follows :

Name of the Project	Ist Plan	IInd Plan	IIIrd Plan	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72
Nala construction (metres)	5,000	—	—	1,000	—	—	500	1,000	1,000
Kharanja (Brick laid lanes) construction (sq. metres)	10,000	10,000	6,000	4,000	45,000	26,970	31,048	31,848	45,550
Kutcha road construction (km.)	290	189	150	9	1-0	0-7	0-3	6-0	6-1
Panchayat ghars (No.)	183	26	6	2	2	6			

CHAPTER XV

EDUCATION AND CULTURE

Though no direct references as to the state of education in this area in the ancient period are to be found, the presence of numerous holy centres and ancient sites leaves little doubt that education must have received faithful patronage here in keeping with ancient traditions. In the *Mahabharata* (Adi Parva, p. 171), Gangadwara is described as being the site of a number of holy *ashramas* (hermitages), e.g., those of Maharishi Bharadwaj and Agnivesha, the latter being the learned preceptor of king Drupad and Dronacharya.

A general survey of the educational system in ancient India reveals that education was well organised and extolled as being the link of friendship between mortals and the gods.¹ Discipline of the mind and body, known as *Brahmcharya* was prescribed as an essential requisite for all during the initial phase of their lives. Education was initially begun at home and later taken up in *gurukulas* and *ashramas* under the guidance of *gurus*. The curriculum covered a host of subjects ranging from a study of the *Vedas* to traditional branches of learning such as *itihasa-purana* (legends and ancient lore), *vyākarna* (grammar), philology, *Chhandashastra* (prosody), *arthashastra* (political economy), *ganita* (mathematics), *dharmashastra* (law), *shastravidya* (the science of war), *ayurveda* (medicine), and one's family profession.² Regular studentship began with the initiation ceremony called *upnayanana*, the pupil being hereafter considered a *drija* or twice-born.³ The system aimed at inculcating in the pupil the attitudes of obedience, service, and austerity.⁴ The period of tutelage varied from fifteen to twenty years. The general pattern of education remained basically intact during the subsequent decades. Sanskrit was mostly studied by the Brahmanas for religious purposes and secular education was run through the mediums of local dialects in *pathshalas* run by private teachers. Most of these were attached to temples.

The early Muslim historians made little reference to this tract. With the founding of the city of Saharanpur in the reign of Muhammad-bin Tughluq (1325-51 A.D.), a stronghold of Muslim cultural influence was established in the region. However, little scope seems to have existed for educational development in this part, as it was open to the inroads of the

1 Altekar; A. S. : *Education in Ancient India*, p. 26

2 *Ibid.*, pp. 261, 264

3 Mookerji, R. K. : *Ancient Indian Education*, p. 67

4 Altekar; *op. cit.*, pp. 261, 265

Mongols at this period. Even under his successor, Firoz, the tract was largely administered from a military point of view. The ravages of the hordes of Timur in 1398, again plagued this area, allowing a small possibility for pursuit of learning at this disturbing period. Under the Saiyids who held sway over this region in the early quarter of the fifteenth century, and subsequently the Lodis, it appears to have been held peacefully till the Mughal conquest of India in 1526.

The tract comprising the present district found no specific mention in the annals of the Suris or Humayun and no specific material is traceable as regards the growth of education in this area during the reign of Akbar or his successors. An important event in the history of Saharanpur during Aurangzeb's reign was the bestowing of this *sarkar* on Sheikh Muhammad Baka who is mentioned as a scholar of note and the builder of a number of mosques, buildings and wells in the town. The impetus to literary growth was undoubtedly well provided during this period, ending with Sheikh Baka's death in 1683.

Education during the mediaeval period was generally imparted to Hindus in *pathshalas* and to Muslims in *maktabs*. No specific reference regarding educational growth in this region is to be found in the period following the first quarter of the 18th century, and in later years the entire tract of the doab, appears to have felt the full effects of the disorganisation that reigned throughout India from 1720 till the British occupation of this region in 1803.

For many years after the introduction of the British rule, *maktabs* and *pathshalas* were the only existing schools which received no official support and maintained a precarious existence. Their scope was limited to imparting the rudiments of reading, writing and arithmetic, or else to elementary instruction in the Hindu and Muslim scriptures. The American Presbyterian Mission started the first school run on western lines in the district in 1837.¹ In 1845, in an enquiry conducted to discover the prevailing condition of education in the district it was revealed that there were in the district 133 Persian, 47 Hindi and 43 Sanskrit schools of which 53 were located in Saharanpur. The number of scholars aggregated 2,756, which was a high figure as compared to other districts. It was, however, reported that there was no general demand for education, especially higher education. The report also revealed that the more promising pupils generally went to Delhi to pursue their studies. The founding of the Thomason College of Engineering at Roorkee in 1847 was a milestone in the history of the development of education in the district.

¹ *District Gazetteers of United Provinces, Saharanpur*, Vol. II (Allahabad 1909), p. 167

The opening of the *tahsili* school at Roorkee in September 1851, marked the birth of vernacular education in the district. This was followed by the opening of a similar school at Deoband in October, one at Saharanpur in 1852 and another at Manglaur in March, 1853. The *tahsili* schools of Gangoh, Ambahta and Jwalapur were opened in December 1854. The Society for the Propagation of the Gospels founded an Anglo-vernacular school at Roorkee in 1856. There were, in 1856-57, seven *tahsili* and 439 indigenous schools with an aggregate attendance of 5,836 pupils in addition to the Anglo-vernacular school at Roorkee and the Mission school at Saharanpur. This revealed a marked improvement in the course of a decade. The vernacular school at Roorkee ceased to function in 1858-59.

A significant change that took place about this time was the introduction of the *halqabandi* system and the maintenance of village schools from the proceeds of a one per cent cess. The experiment was initially made in Saharanpur in July, 1860, next in Roorkee in January, 1861, and, in the remainder of the district in July, 1861. The year 1863 witnessed the establishment of girls' schools, initially started at Saharanpur and Ambahta, and the establishment of a government Anglo-vernacular school at Saharanpur. The Arabic *madrassa* at Deoband was started in 1866 and developed in subsequent years as a famous institution of Arabic learning. It was an off-shoot of the erstwhile Ajmeri Gate College at Delhi. It initially imparted religious training but later taught philosophy, logic, geography and mathematics in the Arabic language. The district had in 1866-67, 101 *halqabandi* and 216 indigenous institutions, with a total of 7,269 students of whom 251 were girls receiving instruction in 18 schools. The subscription vernacular school at Deoband, founded in 1866, received a grant-in-aid from the government. The Anglo-vernacular school at Saharanpur was converted into a *zila* school in April, 1867, a subscription school being started at the district headquarters in the same year. The latter ceased to function in 1872. A new pargana school was opened at Rampur in 1872, those at Nakur and Titron being established subsequently.

The municipal schools were first established in 1872. There were 443 schools with 7,789 pupils in the district by 1876-77 (the number of girls came to 240 only). These included 126 *halqabandi*, 278 indigenous and nine municipal schools, the remainder being secondary schools and numerous mission schools at Saharanpur and Roorkee. The rate of progress in the field of education was not maintained in the next two decades owing to financial problems.

The district board formed in 1883 and reconstituted in 1886 took over the educational duties of the old committee, but a major step was taken in 1896-97 with the introduction of the system of providing grants-in-aid to indigenous schools. The district at this period had 13 secondary and 143 primary schools maintained wholly or in part from public funds. The number

of scholars was returned as 5,639 including 286 girls. However, owing to the omission of the indigenous and unaided schools from the returns, it was not possible to ascertain the total number of pupils under instruction.

The next decade witnessed an encouraging rate of educational growth, the district at the end of this period (1906-1907) having 14 secondary and 205 primary institutions. The total enrolment of boys and girls in these institutions was 7,976 and 584 respectively. There were, at this period 10 middle schools in the district, located at each of the tahsil headquarters and at Manglaur, Jwalapur, Rampur, Titron, Ambahta and Gangoh in addition to the high school at Saharanpur. The district board maintained 32 upper and 78 lower primary schools as well as four girls' schools. It also gave grants-in-aid to 61 boys' schools and four schools for girls. The total enrolment in the institutions under its management or control was 5,942. The municipalities also maintained or supported a number of schools, giving money grants to the mission schools and also to some Sanskrit *pathshalas* at Haridwar and Kankhal, as well as to the girls' schools at Saharanpur and Roorkee. Indigenous schools at this period totalled 140. In subsequent years (i.e. between 1906-07 and 1914-15), no less than 11 lower primary schools were raised to upper primary standard, and 8 new schools of the upper primary level were started. Further, 50 new lower primary schools and 31 new lower primary aided schools were also opened. The primary schools within the municipal limits of Haridwar, Roorkee, Deoband and Saharanpur, maintained out of municipal contribution, were brought under the management of the district board in 1907.

Another encouraging feature of this period was a marked activity towards female education, resulting in 10 new lower primary schools for girls being started in the district. The demand for female education was apparently higher among the Hindus in towns. The District Board High School at Saharanpur was transferred to the provincial education department in 1910. New primary schools were started at Ambahta, Gangoh, Taushipur, Laksar, Ambahta Chand and Charaon in 1912. The total number of girls' schools in 1914-15 was 22 with an enrolment of 938 scholars. Under the special sanction of government, the district board also managed the Anglo-Vernacular School at Roorkee. The Anglo-Vernacular Persian School and the Anglo-Vernacular School at Deoband were brought on the list of government aided schools during the same period. The total number of vernacular, State and aided schools in 1914-15 was 225 with total enrolment of 8,833 scholars.

A primary education scheme was prepared by the district board in 1915 which was sanctioned and enforced in April, 1916. Under this scheme, the

number of schools was revised and new subordinate primary schools and preparatory schools were opened. The salaries of qualified teachers were increased and a sum of Rs 400 was kept in reserve for grants to *maktabs* and *pa'hshalas* and for schools for depressed classes. The private institutions in the district included the Arabic school at Deoband, the Mahadiya school at Jwalapur, Rishikul at Hardwar and the Mazharul Alam Arabic school at Saharanpur. Of these, the Arabic madrasa at Deoband enjoyed a high reputation at this period, attracting students from such distant places as Khiva, Tashkent and Bokhara. It introduced a residential system in about the last quarter of the nineteenth century, and in later years, added a boarding house with sufficient accommodation to the building of the institution. Yet another important feature of this institution was its library, containing numerous rare manuscripts. It also had the patronage of such well-known Arabic scholars of the period, as Shams-ul-alam Maulvi Muhammad Ahmed, who then managed this institution as *nazim*. The term of education for Arabic and Persian courses in this institution was eight and five years respectively, the total enrolment in 1924 coming to 600 students.

The progress of education from 1916 to 1924 was marked by the upgrading of three institutions to the level of high schools in 1921. These were the Kashi Ram High School and the Islamia High School at Saharanpur, and the Government Chamier Orman High School at Roorkee. New primary schools totalling 74 came into existence, involving an increase of 3,210 scholars. The number of boys' schools increased by 80, involving an increase of 3,643 scholars. In the girls' schools, the number of scholars, as compared to that in 1916-17, increased by 112, in spite of one primary and one aided school being closed. The district, at the end of this period, had two night schools for depressed classes in addition to other schools for depressed classes at Nakur, Saharanpur and Jwalapur. Among prominent private institutions were the Rishikul near Kankhal, the Gurukul Vidyalaya and the Arabic school at Deoband. The number of private schools for boys increased by six, the number of scholars increasing by 535.

GROWTH OF LITERACY

The earliest known figures pertaining to literacy in the district were those collected in 1872, showing that only 6,211 males, forming 1.28 per cent of the total population, were literate, while not even a single female was returned as literate. The authenticity of these figures was questionable as the total was less than the number then under instruction, the figures being consequently regarded as inaccurate. The proportion in case of males rose to 4.7 in 1881, that of the females being 0.12 per cent, and the respective figures for 1891 were 5 per cent and 0.19 per cent.

At the census of 1901, the figure of literacy among males was 4.4 per cent, a comparatively low figure, whereas female literacy was recorded as

being 0.22 per cent. The proportions of literate males among Hindus and Muslims were 4.64 and 2.82 per cent respectively.

The figures of male and female percentages in literacy in subsequent decades were as under :

Year	Percentage of literacy	
	Male	Female
1911	5.5	0.6
1921	6.2	0.8
1931	7.3	1.2
1951	20.8	5.3
1961	28.1	10.2
1971	31.5	13.5

The following statement gives details of the numbers of persons of different educational levels in the urban and rural areas of the district at the census of 1961 :

Educational standard	Persons	Males	Females
Urban			
Total population	3,72,091	2,08,357	1,63,734
Literates (without educational level)	85,482	54,154	31,328
General education			
University or post-graduate degree other than Technical	3,915	3,341	574
Non-technical diploma not equal to degree	751	618	133
Technical diploma not equal to degree	134	122	12
Matriculation or higher secondary	21,280	17,773	3,507
Primary or junior Basic	40,822	27,570	13,252
Technical/professional education			
Engineering	239	239	—
Medicine	133	142	11
Agriculture	17	17	—
Veterinary and dairying	1	1	—
Teaching	223	154	69
Others	5	4	1
Rural			
Literates without educational level	1,21,642	99,335	22,307
Matriculation or above	10,662	10,342	420
Primary or junior Basic	38,421	35,415	3,006

GENERAL EDUCATION

General education now includes education from the nursery or pre-junior Basic to the university stage. In 1970-71 the district had 1,389 junior Basic institutions, and 177 institutions of the senior Basic level. In addition to these, there were 96 higher secondary institutions including 22 such institutions for girls. There were 9 institutions of the degree and post-graduate level in the district imparting education in science and art subjects.

The following statement gives the figures of enrolment for each of the following types of institutions during 1970-71 :

Type of institution	Number	No. of students
Junior Basic	1,389	2,07,116
Senior Basic	177	43,926
Higher secondary (up to class XII) for boys	74	34,077
Higher secondary (up to class XII) for girls	22	7,071
Degree colleges (including post-graduate)	9	3,592

Pre-junior Basic Stage

Pre-junior education includes the education of children up to six years of age. A number of these institutions were managed by registered and unregistered private bodies in the district, there being nine such institutions within the jurisdiction of the Hardwar Municipal Board in 1970-71. Of these, the Happy School, Railway Road, Hardwar had an enrolment of 246 pupils. It is a registered nursery school of the Montessori type. The other institutions were the Sati Dhruva Bal Mandir nursery school located near Railway Station, Jwalapur with 197 pupils; the Shivalik Sishu Mandir, Jwalapur, with 125 pupils on roll; the Pragati Sheel Shiksha Sadan, Ram Ghat, Hardwar of the Kindergarten type with 131 pupils; the Nehru Bal Mandir at Hardwar with 102 pupils; the Mahant Sadhu Singh nursery academy at Kankhal with 57 pupils; the Bal Bharati nursery school, the Nehru Bal Mandir and, the Vidya Mandir all located at Kankhal with an enrolment of 40 and 50, and 59 pupils respectively during the above period.

Junior and Senior Basic Stage

The concept of Basic education is based on the Wardha Scheme initiated by Mahatma Gandhi in 1937, was adopted officially with certain

modifications by the State government in 1938. The term Basic now includes education at the junior and senior Basic levels—the former including class I to V, and the latter class VI to VIII.

This scheme implied the provision of free and compulsory education by the State for a period of seven years with the mother-tongue being used as medium of instruction, and, the process of education centering around some useful handicraft, enabling the child to utilise his creative energy in the initial stage of training. It was to replace the vernacular middle stage of examination. As a result of the reorganisation of the primary and vernacular middle stages, in 1948 the highest class at the end of the vernacular middle stage became class VIII, the final examination being equated with that held at the end of the class VIII of the higher secondary school. Education during these stages, i.e., junior and senior Basic stages, was under the control of the local bodies in their respective jurisdictions and the education of boys and girls in the rural areas of the district up to the senior Basic level was supervised by the Zila Parishad till July, 1972 when it was taken over by the government.

In 1970-71, the expenses incurred by the Zila Parishad under this head came to Rs 49,69,715. It managed 985 junior Basic schools (including 258 for girls), and aided another 47 institutions (including 3 for girls), the total enrolment in all these institutions was 1,08,348 boys and 23,733 girls respectively, the total number of teachers being 2,658.

The number of senior Basic schools maintained by the Parishad in the above year was 102 (including 41 for girls), there being one such institution for boys aided by this body. The total enrolment in these institutions was 7,608 boys and 292 girls respectively, the total number of teachers being 404. The staff appointed for this purpose included one deputy inspector of schools who was assisted by 21 subdeputy inspectors of schools, female education being supervised by a deputy inspectress of schools and nine subdeputy inspectresses.

The following statement gives particulars regarding senior and junior Basic institutions which functioned under the different municipal boards of the district in 1970-71 :

Name of Municipal Board	Type of institution				No. of Students		No. of teachers	
	Junior Basic		Senior Basic					
	For boys	For girls	For boys	For girls	Junior Basic	Senior Basic	Junior Basic	Senior Basic
Saharanpur								
Managed	51	29	4	3	12,973	771	—	{ 439 (total boys' and girls' senior and junior Basic schools)
Aided	10	9	11	15	5,918	4,300	—	
Hardwar								
Managed	21	23	—	2	4,502	4,531	245	11
Roorkee								
Managed	11	8	1	1	2,559	332	85	9
Aided	5	3	—	—	961	—	—	—
Manglaur								
Managed	8	5	—	1	1,253	—	45	6
Gangoh								
Managed	4	2	—	—	490	7	21	—

Reorientation Scheme

This scheme aims at training students in agriculture and local crafts to create in them a sense of the dignity of labour and to improve the finances of the institutions where it is enforced. It is in force in 67 educational institutions of the district. Agriculture is taught as a compulsory subject in 63 of these institutions having 174 hectares of land attached to them. The teachers are especially trained in agriculture, rural economics and veterinary science. Spinning and weaving is taught as a craft in 3 of the remaining institutions and wood craft being taught in one.

Secondary Education

With the establishment of the U. P. Board of High School and Intermediate Examination in 1921, the high school examination began to be held at the end of class X and the intermediate examination at the end of class

XII. Secondary education now covers education from the Basic stage to the end of class XII. It is supervised in the district by a district inspector of schools, and his staff.

The district had 74 boys' and 22 girls' higher secondary schools with 34,077 boys and 7,071 girls on roll in 1971-72. The number of higher secondary institutions in the district was 103 in 1972-73 of which 65 were intermediate colleges and 38 higher secondary institutions up to class X. The number of girls' institutions up to the intermediate level was 13, there being 8 institutions for girls at the high school level.

EDUCATION OF SCHEDULED CASTES AND OTHER BACKWARD CLASSES

Particular emphasis is now laid on the education of members of the Scheduled Castes and Other Backward Classes. Girl students of the Scheduled Castes are given free education up to the higher secondary classes, the deserving ones among them being awarded scholarships, books and aid. The wards of those whose monthly income is below Rs 250 are exempted from payment of fees in higher classes. The number of pupils receiving education in the junior, senior Basic and higher secondary institutions in 1970-71 was as follows :

Type of school	No. of Scheduled Castes	
	Boys	Girls
Junior Basic	25,644	7,739
Senior Basic	4,811	203
Higher secondary (up to Class X)	2,357	80
Higher secondary (up to Class XII)	672	37

Higher Education

There were in the district 9 institutions for higher education of which 6 were post graduate and 3 degree colleges in 1970-71.

The J. V. Jain College at Saharanpur was established in 1955 and offers, at present, courses up to the post-graduation level. The highest examinations for which students are prepared here are M. A., M. Sc., M Com., M. Ed., and LL. B. The total enrolment in this institution in 1972-73 came to 3,019 students.

The Kanahiya Lal Degree College at Roorkee was established in 1960, the courses in B. Ed. being introduced in 1964. The highest degrees awarded here are those of the post-graduation level in both science and art faculties. The total enrolment in this institution in the above period was 381 students

The Munna Lal Jai Narain Khemka Girls College at Saharanpur traces its origin to the year 1966 and offers facilities for education at the graduation and post-graduation levels. The courses offered cover such subjects as sociology, economics, political science and languages at the M.A. stage, and, humanities and music at the graduation level. In the period under review it had 756 pupils on roll.

Maharaj Singh College, Saharanpur was founded in 1957, and imparts education of the post-graduate level in both arts and science subjects. In 1972-73 the total enrolment in this institution was 1,346 pupils.

Raja Mahendra Pratap Prem Vidyalaya at Saharanpur traces its origin to 1958 functioning at present as a post-graduate institution in all subjects pertaining to agricultural science. It had 95 students on roll during 1972-73.

The B.S.M. Degree College, Roorkee is another institution tracing its origin to this year and prepares for degrees in arts up to M.A. The number of students in this institution was 543.

Sanatana Dharam Prakash Chand Girls College, Roorkee (established 1966), is a degree level institution in both arts and science subjects. In the above period it had 259 students on roll.

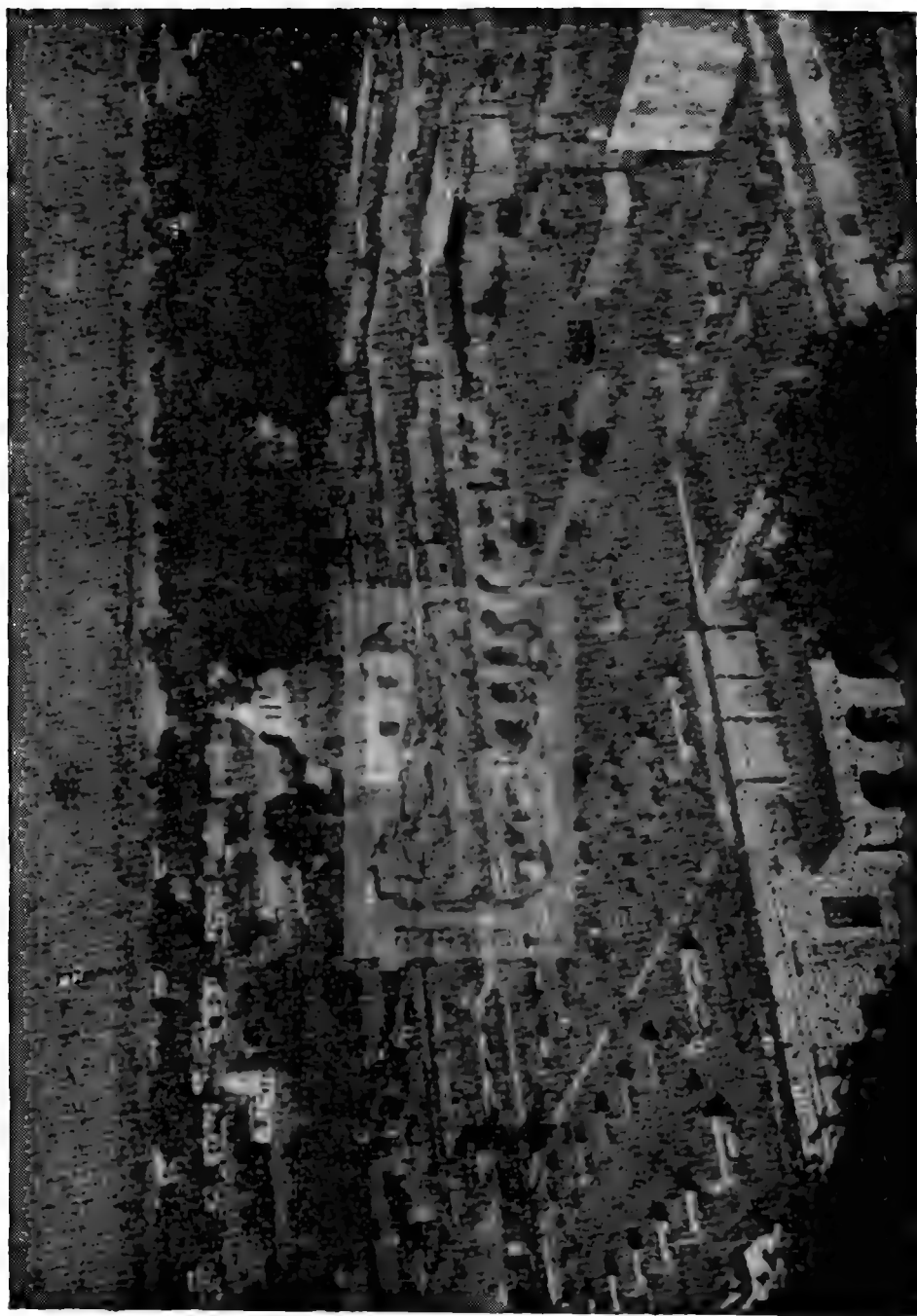
The Gochar Mahavidyalaya, Rampur-Maniharan, imparts education in agricultural science and arts up to the B.A. level, the total enrolment in this institution in 1972-73 coming to 120 students.

The S. M. J. N. Degree College, Hardwar, founded in 1960, offers education in arts up to the B.A. level. It had 378 students on roll in the period under review.

PROFESSIONAL AND TECHNICAL EDUCATION

There were in the district nine institutions providing professional and technical education in 1970-71. Of these, the three government normal schools at Roorkee, Jwalapur and Hardwar imparted training in the teaching profession, while the Ayurvedic College and the Rishikul Ayurvedic College, both located in Hardwar, offered training in the Ayurvedic system of medicine.

The Kanahaya Lal Polytechnic at Roorkee awards diplomas to successful trainees in civil, mechanical and electrical engineering. The Industrial Training Institute at Saharanpur was established in 1963, and is functioning under the directorate of training and employment, U.P. It prepares trainees in such vocational and technical trades such as carpentry, mechanics, welding and bleaching etc., in one and two year courses respectively. The trainees



Aerial View of the Main Building of the University of Roorkee

are awarded a National Trade Certificate by the National Council of the Union Ministry of Labour, Planning and Rehabilitation. It had 300 men trainees on roll in 1970-71.

University of Roorkee

One of the pioneer engineering institutes in India, this institution has more than 100 years of tradition in grooming the engineering cadre in this country. The impetus to the establishment of this institution was provided by the construction of great canals and roads in the 19th century which necessitated the introduction of a systematic training for engineers in India. Besides, the surveys then in progress here demanded professional skill of a higher order than was available. Europeans engaged in engineering works needed instruction in the local languages, especially in the vernacular terms of science and also in the peculiarities of material and construction works typical to this country. On the other hand, their subordinate Indian staff needed scientific instruction in order to develop their utility and energy. The first engineering classes at Saharanpur were started in January 1845 by Lt. Baird Smith. In 1847, when Lord Hardinge resolved to commence work on the Ganga canal, the demand for trained engineering personnel became still more acute. This may rightly be said to have given birth to the idea of an engineering college at Roorkee.

The scheme forwarded by Mr Thomason, the lieutenant-governor of North-Western Provinces in this behalf was readily supported by the Government of India and the foundation of the erstwhile college was laid on 19 October, 1847. The institution originally started with three departments. The first batch of pupils was enrolled in January, 1848 and teaching work was carried out in tents. The total intake of trainees was 24, eight of these being trained as subassistant engineers in the first department, ten European non-commissioned officers and soldiers to be appointed as overseers in the department of public works in the second department, and six Indian students to be trained in surveying, levelling and engineering drawing. The principal was assisted by a staff consisting of a head master, a drawing master and two Indian teachers.

A remarkable feature of this institution at this phase was the absence of any tuition fee in all the departments of the college. In view of the growing need for more roads, canals and other large undertakings in the territory acquired by the British after the outbreak of the hostilities in the Punjab, a revised scheme for enlarging this establishment was brought forward by the lieutenant governor. These proposals were largely sanctioned, and in 1854, the institution received its name of 'The Thomason College of Civil Engineering' at Roorkee. The college buildings were completed in 1856 at an estimated cost of Rs 1,56,217.

After the events of 1857, the college was remodelled on new lines. A restriction on stipends, hitherto paid to all the students, was imposed and the number of guaranteed appointments to public services was curtailed in

1875. The entire financial responsibility was transferred to the local government in 1882. Greater facilities for Indians were provided in order to facilitate their entry into provincial engineering services and the Indian army at about same time, and the college continued to function as the source of this supply.

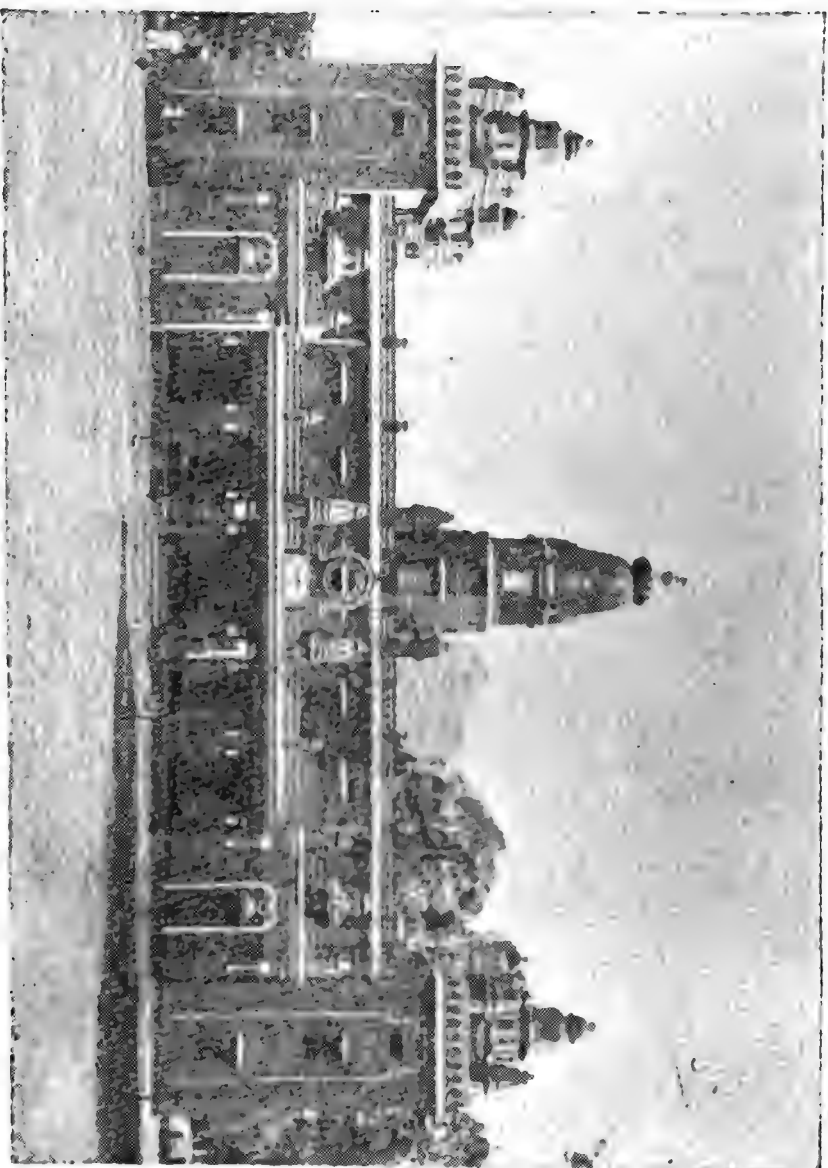
From 1896 onwards, all students except soldiers were required to pay tuition fees, the scope of the institution being extended so as to include industrial and technical education also. The college was subsequently transferred to the department of education and affiliated to the University of Allahabad. A management committee under the chief engineer to the local government was appointed, in addition to which a competitive examination was introduced for those desirous of gaining admission to this college in the above year. A number of new classes were started and the staff increased.

The opening decades of the present century marked further developments and additions. A complete reorganisation scheme was drawn up in 1919 and a new overseer class of intermediate standard to replace the upper and lower subordinate was opened in 1922. Departments of electrical and mechanical engineering were started in 1946, the college being henceforth named the 'Thomason College of Engineering'. Female students were also allowed admission on the basis of a common competitive examination from this year onwards.

The year 1949 marked the upgrading of the college to the status of a university, the institution receiving its charter on 25th November, 1949. A Hindi directorate was set up at the university in November, 1963, at the request of the Commission for Scientific and Technical Terminology appointed by the Ministry of Education, to evolve technical and technological terms.

The establishment continued to grow in succeeding years at a phenomenal rate, and the university operated no less than eleven academic departments in 1971-72. These were the departments of civil, mechanical and electrical engineering, architecture, electronics and telecommunication engineering, metallurgical engineering, chemical engineering, physics, chemistry, mathematics, and, geology and geophysics. Each of these departments offers various courses of both post-graduation and graduation levels. Degrees are awarded for all the courses except for some, e.g., hydrology and building science, post-graduate diplomas being awarded to successful candidates in these subjects.

The sprawling campus spread over 365 acres (148 hectares) also houses seven new hostels accommodating nearly 2,400 students in addition to numerous facilities, e.g., a swimming pool and a cinema for out-door games and recreation. The Water Resources Developing Centre, established here in



Gurukul Kangri Ved Mandir, Haridwar

1955 with the object of bringing together various engineering branches from Asia and Africa. The Earthquake Engineering School, established in the university in 1960 under the auspices of the Council of Scientific and Industrial Research; the Refresher Course Department, and the Pilot Production Centre have their own buildings within the campus area.

The rate of development may be further illustrated by the fact that the expenditure on development works in the university during the Ist, IInd and IIIrd Five-year Plans was Rs 331 lakhs, the sanctioned ceiling for the fourth Five-year Plan period being Rs 1.53 crores. The annual intake of 60 in the degree courses before 1949 increased to over 500 at the end of the Third Plan period. Four science courses and 15 engineering courses were added to the curriculum with added accent on research work.

The administrative body of the university consists of the chancellor, the vice-chancellor, the pro-vice-chancellor, the registrar and other officers in accordance with the provisions of the Roorkee University Act, 1948, (U. P. Act IX of 1948). The total enrolment in 1971-72 came to 1,714 students, the staff having 341 members.

Gurukula Kangri, Harwar

The Gurukula Kangri University at Harwar was established in 1900 as a result of the labours of Swami Shradhanand. Owing to an inundation of the Ganga in 1924, a major portion of this institution was swept away, subsequent to which, it was re-established in 1926 over an area of 700 acres (283 hectares) in the suburbs of Kankhal and Jwalapur. The system of education patronized by this institution earned liberal praise from Sir Ramsey Macdonald, later prime minister of England, who after his sojourn here in 1914 remarked, "Gurukula is the most momentous thing in Indian Education that has been done since Macauley sat down to put his opinions into minutes in 1835." It also had the honour to be associated with such illustrious names as Reverend C. F. Andrews, who remained here as a teacher for some time, and, such eminent nationalist leaders and personalities as late Jawaharlal Nehru, Madan Mohan Malaviya, Ravindra Nath Tagore and Gandhiji, who visited this institution thrice.

The Gurukula seeks to establish a rapport between the old and new in both oriental and occidental learning. The curricula includes the study of English, western philosophy, politics, economics, history, psychology, physics, chemistry, biology, and agriculture side by side with Sanskrit literature and Ayurveda. The medium of instruction for such subjects as science, economics, philosophy and psychology has always been Hindi, a unique feature of the institution. Facilities by way of a museum, library, laboratories, botanical gardens, indoor hospital with X-ray plant,

an Ayurvedic pharmacy, farms and dairies are provided for. The basic aim of education imparted here is to imbibe the best in both the old and new, in order to cater to the needs of the present day society.

Saharanpur Paper Technological Institute

Another institution imparting professional and technical education in the district is the Saharanpur Paper Technological Institute, which runs a certificate and diploma course in paper technology. The institute primarily aims at training technical personnel for the paper industry, enabling them to handle and maintain complicated machinery in addition to carrying out efficiently the various chemical and mechanical processes involved in successive stages of manufacturing pulp, paper and boards of various types. This institute was established as a result of the labours of a Swede, Mr W. G. Skold who, in his capacity as technical advisor to the Star Paper Mills at Saharanpur, suggested the setting up of an up-to-date training centre in paper technology in India. The proposal was favourably viewed by the Central and State governments, and subsequent to the Indo-Swedish agreement of June, 1963, the Institute of Paper Technology was founded at Saharanpur in 1964. The Swedish government supplied equipment worth Rs 25 lakhs and the Swedish International Development Authority provided fellowship for training ten Indian teachers in Sweden, in addition to which it made available the services of six Swedish experts under the guidance of a chief adviser for five years. The Union government provided aid and loans towards the establishment and construction of teaching, administrative and technological blocks, 10 blocks of hostels having 24 to 36 seats for students, an auditorium, a guest house and over 40 residential blocks for the teaching staff and ministerial staff. The State government provided over 10 hectares of land at a cost of Rs 10 lakhs towards the establishment of this institute. The total cost for establishing the institute came to Rs 1 crore.

The courses offered here include technician's course for middle level and supervisory positions, operatives courses for pulp, paper and recovery departments, and the specialist mechanics course for teaching instrumentation, electrical work, welding, fitting and machine shops. Provision is also made for conducting special short-term (six months) and refresher courses (four weeks) for personnel employed in the paper industry in order to upgrade their operational aptitude and bring their technical knowledge up-to-date. The technician's course is of two years duration and includes six weeks practical mill training after the first year. Minimum qualification for admission to this course, designated as Diploma in Paper and Pulp Technology, is a degree in science having physics, chemistry and mathematics as compulsory subjects. The specialist-mechanics course is of 18 months duration, being open to candidates who have completed an 18 months course in craftsmanship or a three-year course in a junior technical school.

Diploma students are also given project work in addition to the specified courses mentioned above. These projects are based on problems connected with Pulp and Paper Technology. It involves a study of the theory, the practical work, being evaluated on the result of the former and the standard of the effort.

The minimum qualification for the certificate course for operatives is matriculation with science and mathematics. Owing to limited seats in the diploma course, a number of science graduates are admitted to the certificate course. This includes a two-year training in a paper mill. The candidates, on successful completion of training, are entitled to a certificate from the Board of Technical Education, U. P.

The institution possesses up-to-date equipment in its paper, pulp and instrumentation laboratories, which also facilitate research and investigation on these items on modern lines. Excellent workshops for practical training in mechanics, maintenance, machining, welding, smithy, carpentry and electrical engineering are yet another asset of this institute. The standing need for a pilot plant for industrial research, training and production is expected to be fulfilled through the United Nations Development Programme.

The governing body for administration is headed by a chairman, the post being held by the secretary to government technical education department, Uttar Pradesh, Lucknow. Other members include, two representatives of the Uttar Pradesh government, two representatives of the Central government, one member of the All India Council of Technical Education, three representatives of the paper industry nominated by the State government in consultation with the Central government, a representative of the State Board of Technical Education, two members co-opted by the board of members as and when necessary, and the principal, who is an ex officio member.

In 1971-72, the institute had a staff of 17 members, including the principal, four heads of department, four senior instructors, seven junior instructors and one workshop superintendent, excluding workshop assistants, demonstrators, and laboratory demonstrators. A total of 81 trainees in diploma courses, 132 in certificate courses and 23 in short-term courses of mechanical, electrical and chemical engineering passed out of this institute in 1971-72.

Central Building Research Institute, Roorkee

The Central Building Research Institute at Roorkee offers short-term training extending to three months to engineers, architects and technologists in various building construction techniques. However, it has no degree or diploma courses. The institute traces its origin to the year 1943, when the

Council of Scientific and Industrial Research, set up a Building Research Committee under the chairmanship of late Teja Singh Malik to conduct planned research pertaining to building construction and research in India. At its first meeting in 1944, the committee viewed proposals suggesting the establishment of two units, viz., a division of buildings and housing attached to the National Physical Laboratory, and a Buildings and Road Research Institute as suggested by the Industrial Research Planning Committee. These were considered inadequate and the committee proposed to set up immediately a Building Research unit at Roorkee to work in co-operation with the Thomason College of Engineering. This unit became operational in 1947, and was transformed into the Central Building Research Institute in 1950. The opening ceremony was performed in 1953, its parent body, the Council for Scientific and Industrial Research being then headed by the late Jawaharlal Nehru.

The institute offers research facilities in respect of problems dealing with building material, methods of construction, performance of buildings, and survey and information in context of conditions specifically related to India. Such factors as comfort and efficiency under tropical conditions, study of soil stabilization, use of indigenous material, utilisation of industrial wastes and construction of houses for low-income groups on an extensive scale are covered under this project. The institute is headed by a director, the other staff including two assistant directors, an administrative office, junior scientific officers, and senior and junior scientific assistants.

U. P. Irrigation Research Institute, Roorkee

With the construction of a number of important irrigation works and development of new project in the State in the nineteenth century, the necessity of employing the technique of model experimentation was being felt increasingly and led to the setting up of a small hydraulic station at Lucknow in 1938 to study the problems of scour and erosion below the falls and bridges on the irrigation channels. As the research station at Lucknow was unable to cope with the increasing number of problems related with irrigation and power engineering which arose as a result of post-war development, the State government established in 1947 the Irrigation Research Station at Bahadurabad, 19 km. from Roorkee on Roorkee-Hardwar road, which was raised to the status of a full-fledged research institute in 1949 under the charge of a director of the rank of a superintending engineer. In 1955, the government reorganised the institute and its work and scope was very much expanded to cover new fields of research. The present set up of the institute now consists of the Hydraulics, Soil and Material Testing, Ground Water and Basic Research divisions. Each of these research divisions is under the charge of a research officer assisted by a number of assistant research officers, supervisors, scientific

assistants and model assistants. The hydraulic research division also maintains a meteorological observatory which is located at Bahadurabad and extends over an area of about 30 hectares.

This is one of the premier institutes in India handling complicated technical problems pertaining to various irrigation and power projects, such as Yamuna, Ramganga, Gandak, Sardar Sahayak, Maneri Bhali, Rihand and Obra projects of the State. The institute is not a teaching institution nor does it award any degree or diploma.

The work done at this institute has led to better design and substantial economy in the works executed by the irrigation and other departments and has resulted in more efficient and better hydraulic and structural designs. The institute publishes about fifty technical reports annually as also an annual research report.

Oriental Education

Sanskrit—Of the 21 Sanskrit institutions in the district 11 were located at Hardwar, 6 at Kankhal and 1 each at Deoband, Jwalapur, Roorkee and Saharanpur in 1971. The oldest is the Basti Ram Sanskrit Pathshala at Kankhal which was established in 1870.

The Gurukula Vidyalaya at Jwalapur (which was established in 1907), had an enrolment of 149 students and 5 teachers in 1970-71. The Bhagvan Das Sanskrit Vidyalaya, Hardwar (established in 1964), had 94 students on roll, and 8 teachers on its staff. The third largest institution was the Sanatan Sanskrit Pathshala at Saharanpur, established in 1925, which had 60 students and 8 teachers.

Some details of other institutions are given below :

Name of institution	Year of foundation	No. of students	No. of teachers
Muni Mandal Sanskrit Pathshala, Kankhal	1909	32	4
Bholanand Sangved Vidyalaya, Hardwar	1913	27	3
Devikund Sanskrit Vidyalaya, Deoband	1914	50	4
Rama Krishna Sanskrit Mahavidyalaya, Hardwar	1920	53	4
Shyam Shankar Sindhi Sanskrit Pathshala, Kankhal	1929	20	3

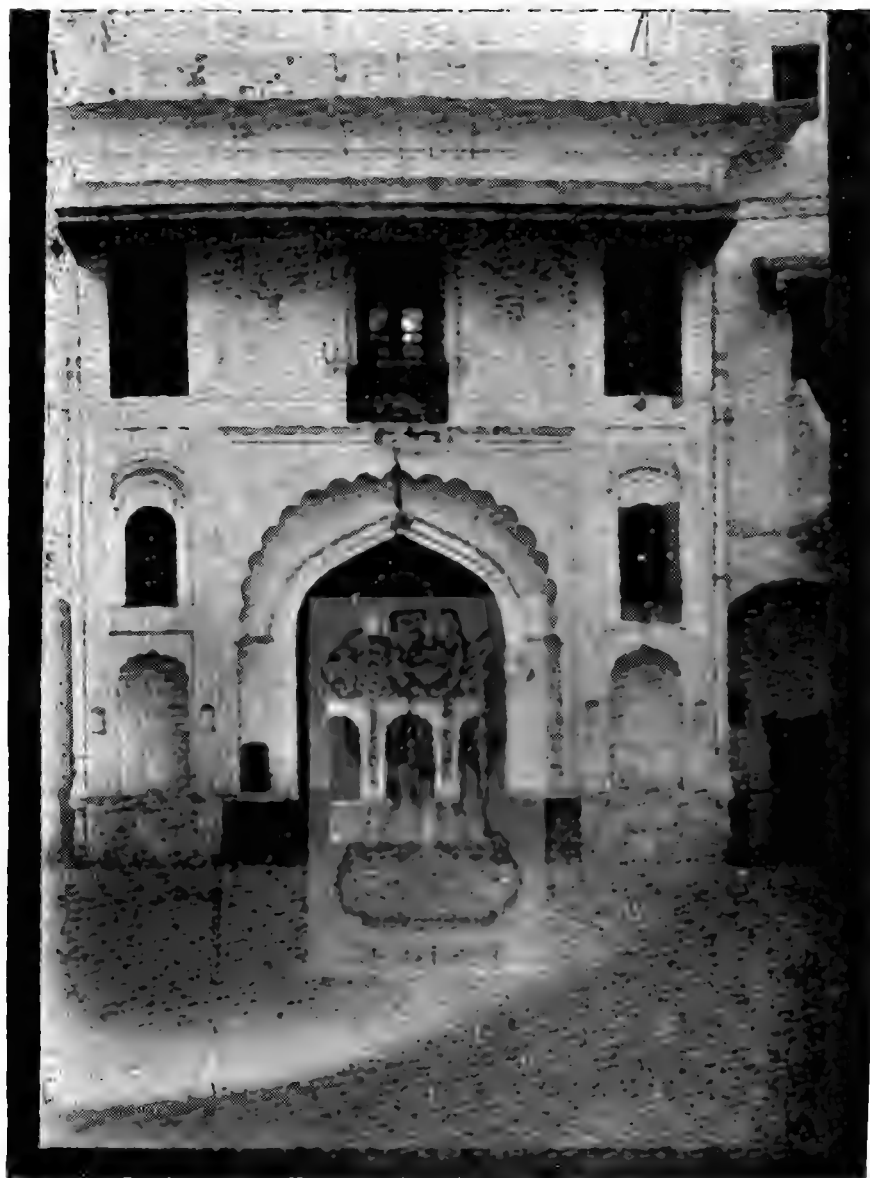
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Name of institution	Year of foundation	No. of students	No. of teachers
Nirmal Sanskrit Pathshala, Kankhal	1930	51	6
Bhartiya Sanskrit Vidyalaya, Roorkee	1934	31	3
Udasin Sanskrit Mahavidyalaya, Kankhal	1935	45	4
Jai Bharat Sanskrit Pathshala, Hardwar	1948	48	5
Jagdev Singh Sanskrit Vidyalaya, Sapt-Sarowar, Hardwar	1959	51	5
Chetan Jyoti Sanskrit Vidyalaya, Hardwar	1963	20	3
Garibdasi Sanskrit Vidyalaya, Mayapur	1964	52	5
Rishi Sanskrit Vidyalaya, Kharkari, Hardwar	1965	23	4
Ramanuj Sanskrit Mahavidyalaya, Hardwar	1965	53	6
Guru Mandal Sanskrit Vidyalaya, Hardwar	1966	27	4
Nigamagam Sanskrit Vidyalaya, Hardwar	1967	7	2
Chandra Sanskrit Vidyalaya, Bhagwathcharan	1968	35	3

All these institutions are attached to the Varanaseya Sanskrit Vishwa Vidyalaya, Varanasi.

Arabic and Persian—The most prominent institution imparting education in Arabic and Persian literatures is a Madrasa Dar-ul-uloom located at Deoband. Tracing its origin to the year 1866, it was originally founded within a mosque known as Chatta Masjid and was an off-shoot of the now defunct Ajmeri Gate College at Delhi. The institution was subsequently shifted to a spacious building where it is situated today.

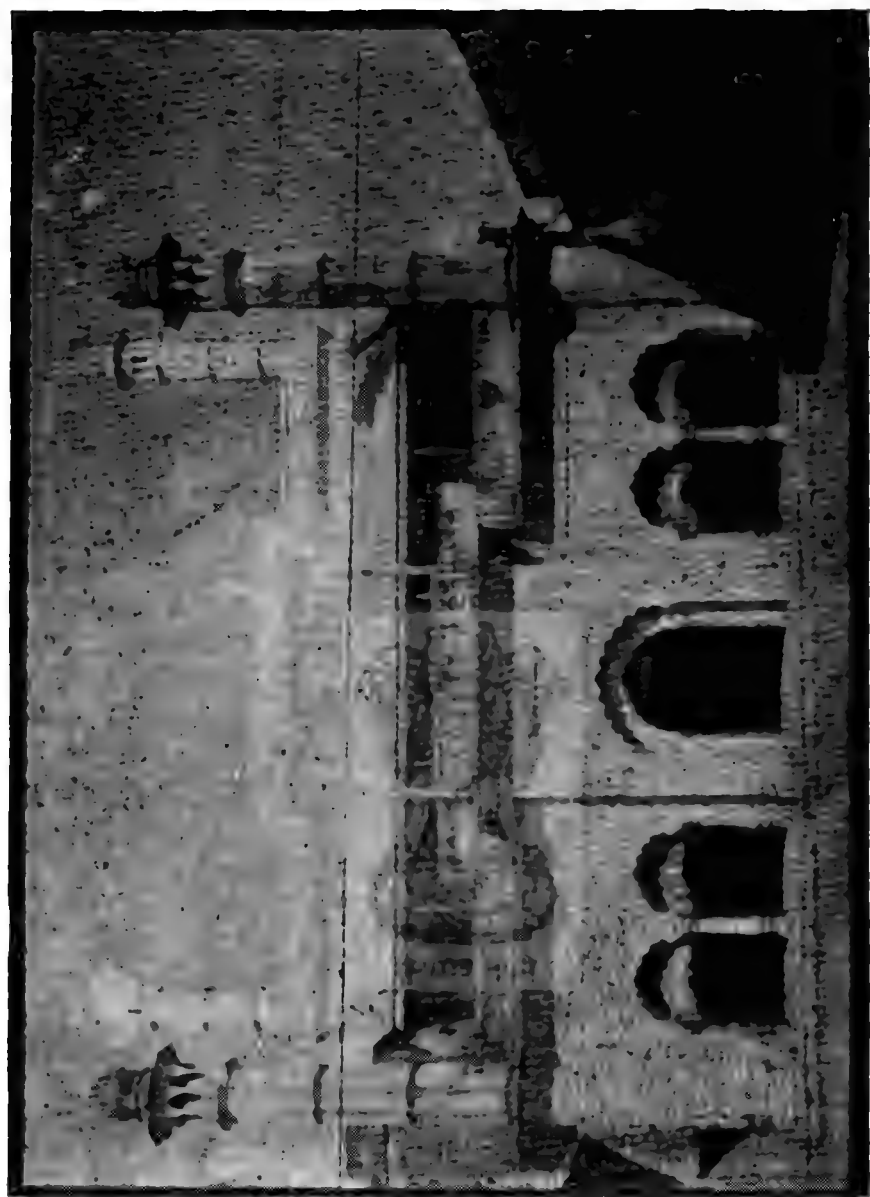
Education here is primarily based on Islamic theology, students being awarded the degree of Maulvi Fazil after the completion of a 15 year course. Facilities are also offered for the study of English and the Unani system of medicine or Tib in addition to the curriculum. Of the 1,500 students receiving education here at present, some are from Malaysia, Thailand, Africa and Saudi Arabia. It is an entirely self-supported institution and runs on an



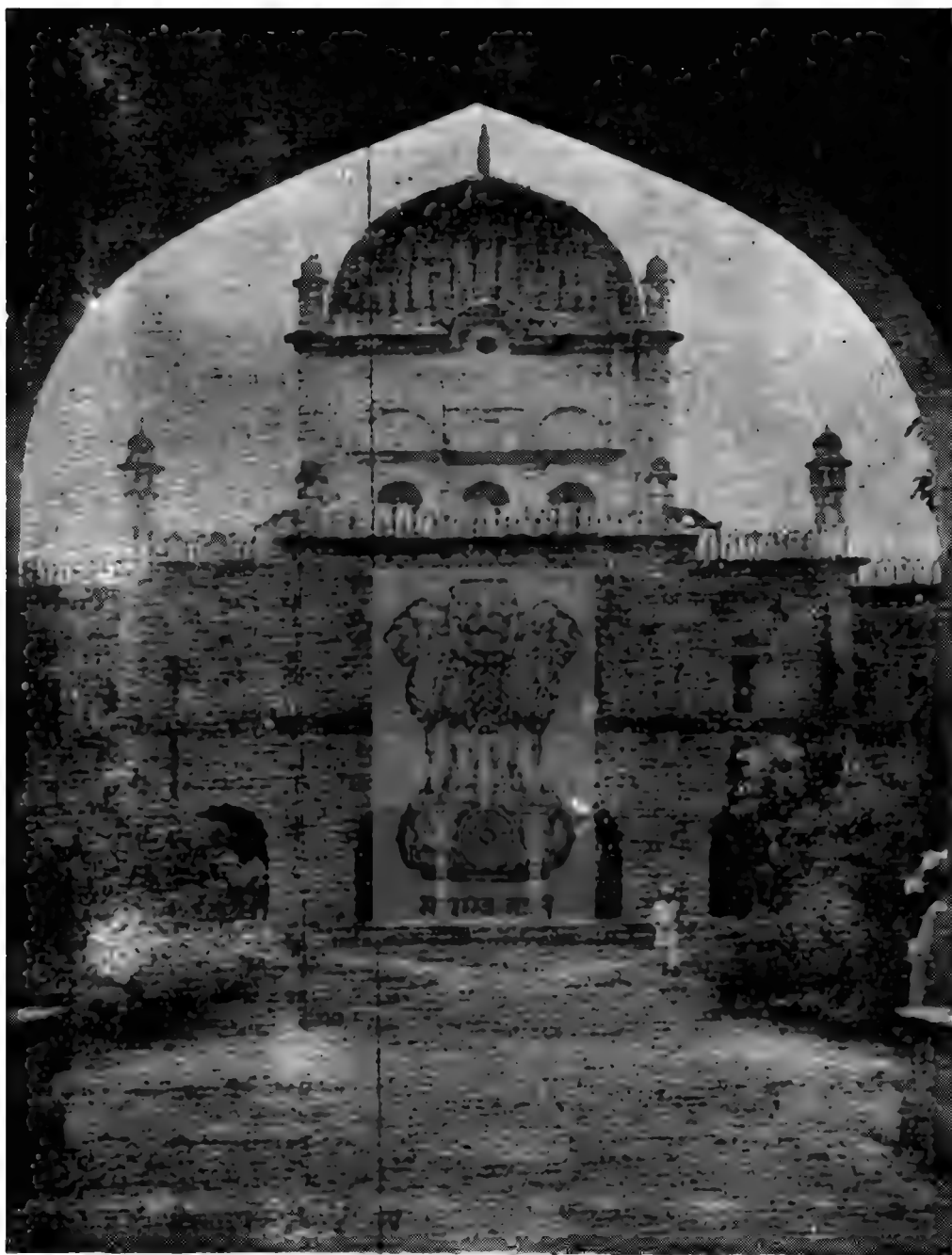
Andaruni Sadar Darwaja Dar-ul-Uloom (Internal Main Gate of the Administrative Building of Dar-ul-Uloom) Deoband



Dar-ul-Talaba Jadid Dar-ul-Uloom (Modern Hostel of Dar-ul-Uloom) Deoband



Masjid Dar-ul-Uloom, Deoband



Darul-Tafsir Dar-ul-Uloom (House of Annotation of Dar-ul-Uloom) Deoband

annual subscription of about Rs 12 lakhs. The library of this institution is the biggest collection house of oriental books in the whole district, the institution itself ranking as a prominent seat of Persian and Arabic studies in Asia today.

Another such institution in the district is the Madrasa Makhzanul Uloom, established in 1914. The courses of study here include Arabic and Persian, the examinations being held by the Board of Arabic and Persian Education, U. P. It had 314 pupils and 6 teachers in 1970-71. The working of this institution is supervised by the deputy inspector of Urdu medium schools, Meerut, at the regional level.

ADULT EDUCATION

Adult education in the district is supervised by the planning department, there being 149 such institutions in 1971-72, with 4,626 pupils on roll. These included 2,384 students belonging to the Scheduled Castes, there being 39 teachers (from the Scheduled Castes) in the staff to impart education to the adults undertaking education under this scheme. The duration of the course is six months, the scheme primarily aiming at providing some form of employment to the unemployed matriculates from rural areas.

FINE ARTS

Art and Architecture

The architecture of buildings at religious places of antiquity in the district, e. g., Hardwar and Kankhal is primarily Indian in concept, whereas constructions tracing their origin to the Muslim period, e. g., those located at Ambahta, Behat, Deoband, Gangoh, Manglaur and Saharanpur, largely follow the Mughal style of architecture. Principal features of a few temples, e. g., in the Daksha or Dakshineshwara temple in Kankhal, are an enclosing quadrangle, surrounded by bells, and containing, in addition to the main building in the centre, a number of shrines; the other temple at Kankhal, the Chhatttri, constructed in 1881, being built on a massive stone platform with usually deep foundations to withstand the action of the Ganga on whose bank it is situated. Mosques and tombs dating to the medieval ages, mostly follow the traditional concepts of Muslim architecture, i. e., domes and minarets. The spacious building housing the Madrasa Darul-uloom at Deoband established in 1866, is an impressive structure built primarily on lines of architecture found in Muslim buildings at that time. The dome of the Chatta Masjid, where the institution was originally housed, is a beautiful specimen of the same. The Jama Masjid at Saharanpur, constructed in the first decade of the present century, was based on the architectural pattern of the famous Jama Masjid at Delhi, conspicuous by its lofty minarets.

Among constructions based on European patterns of architecture, the building housing the University of Roorkee, may be described as an impressive edifice in the Renaissance style.

Libraries and Reading-Rooms

Of the numerous libraries functioning in the district in 1970-71, the Zila Parishad of Saharanpur managed 28, which were located in the senior Basic institutions under its jurisdiction. The oldest and largest of these was the library of the junior high school at Nakur established in 1937, with a collection of 2,000 books. The second largest library under the management of the Zila Parishad is located in the junior high school, Saluni. Founded in 1939, it had a collection of 1,787 books in 1970-71. The number of books in the other libraries maintained by the Zila Parishad varied between 200 and 1,539 books. An amount of Rs 2,320 was given by way of grant to these libraries in 1970-71. Other libraries functioning in the district in 1970-71, were, the Nav Yuvak Pustakalaya, Kailashpur, the Mohummad Ali Library, the Tilak Library, the Gandhi Library, the Harijan Library, the Jatav Library—all located in Saharanpur; the Bhratri Mandal Library and the Ram Krishna Yogashram Library, both located in Deoband.

The library of the University of Roorkee is yet another important store house of books, journals and miscellaneous literature. It had a total collection of 75,000 books in 1971-72 of which 67,000 were on engineering, 5,000 on science and 3,000 on humanities and social sciences.

The largest collection house of books on oriental subjects is the library maintained by the Madrasa Dar-ul-uloom at Deoband. Important among its collections are, two volumes of the *Quran* said to date back to the seventh century, and, numerous manuscripts relating to different branches of learning. A priceless manuscript of the work dealing with religious themes, said to have been composed by Aurangzeb, is also contained in this library. The total collection of books number approximately 60,000, including manuscripts.

Bharat Scouts and Guides

The Bharat Scouts and Guides, Hardwar, a branch of the all-India organisation of the same name, was established in 1919 with the aim and object of cultivating a spirit of service to humanity, encouraging co-operation and fostering of fellowship, character building and discipline among the youths. It trains its members to render social services of various types by rescuing people from fire and drowning, locating lost children, arranging for drinking water, supplying all the information regarding pilgrimage to Badrinath, Kedarnath, etc. It also propagates against the evil effects of intoxicants.

It runs a dispensary, a library and a reading-room. It organises camps, hikes and other programmes at regular intervals for scouts and guides.

A boys' scouts association was established at Roorkee in 1970 with the object of rendering social services and assisting in the maintenance of order in meetings.

MEN OF LETTERS

Arabic, Persian

Sheikh Muhammad Baka the earliest known scholar of the region comprising the present district of Saharanpur, flourished in the seventeenth century. He is credited with the composition of work entitled *Mirat-i-Alam*.

Sanskrit, Pali

Satyaketu Vidyalkar, Suryakanta Acharya Sarve, Baldev Shastri 'Abhinave' and Bhagiratha Shastri are some of the eminent scholars and authors produced by this district. Kishoridas Vajpai, though not actually born here has settled down at Kankhal for several decades and is considered to be one of the great grammarians of this age.

Hindi

Among writers of repute belonging to this district names of Kanhayalal Misra 'Prabhakar', Ramesh Bedi, Krishna Chandra Sharma and Atrideo Gupta may be mentioned.

Urdu

Zoe Ansari born at Saharanpur has published a number of books on different topics in prose.

CHAPTER XVI

MEDICAL AND PUBLIC HEALTH SERVICES

Medical Facilities in Early Times

Although no record is available now there is every reason to believe that facility of Ayurvedic treatment had existed here as elsewhere in the doab. The practitioners called *vaid*s generally did not charge any fee from poor people taking it to be a part of their pious duty.

During Muslim rule, the Unani system of medicine was introduced. It was based on the Arabic and Greek systems and was influenced by celebrated hakims like Rahzes, Habibum-Abbo and Avicenna.

The allopathic system of medicine was introduced in the nineteenth century and is now the most popular system in the region. At first the hospitals and dispensaries in the district were placed under the charge of the district board, though the civil surgeon looked after matters relating to their administration in addition to medical work. Some time before 1860 the first hospital in the district was started at Saharanpur, which was rebuilt on a larger scale in 1875, and a second was opened at Roorkee. A dispensary was started at Deoband in 1860, and in 1863 a dispensary came into existence in Jwalapur. In 1869, a dispensary was opened at Nakur and the following year at Gangoh. Later on, in 1876, a new dispensary was opened at Manglaur and afterwards at Hardwar. There were small canal dispensaries at Kalria and Mayapur for the benefit of employees. In addition to these, there was a police hospital and two railway dispensaries. There was a female hospital at the district headquarters, maintained by the local branch of the Dufferin fund and aided by government grant. The utility of such dispensaries may be estimated from the extent of services rendered by them. From 1872 to 1875 the persons treated annually numbered 31,462. In 1907, the number of visitors rose to 91,054. The total expenditure on the district board dispensaries amounted to Rs 16,806 in 1870 against an income of Rs 27,177 of which Rs 8,200 came from the local funds, Rs 1 687 from the municipal grants and Rs 3,585 from subscription.

In May 1912, two travelling dispensaries were started in the district and in 1913 a temporary canal dispensary was opened at Bhimgoda weir division, but it was closed down in 1920. A public charitable dispensary, called Jain charitable dispensary was founded in 1909 by Babu Daya Chand. This dispensary was supported by voluntary subscriptions and treated about 40,000

patients annually. It is now called the Jain charitable hospital. One female dispensary opened at Hardwar towards the close of 1931, was named after the donor, Chain Rai. Two registered medical practitioners were subsidized by government for settling down in the rural areas. One of them started his dispensary at Raipur and the other at Rampur.

The Seth Baldev Das Bajoria Hospital, Saharanpur, and the Womens' Hospital, Saharanpur, were opened in 1959. The Civil Hospital, Roorkee; Womens' Hospital, Roorkee; General Diseases Hospital, Hardwar; Chain Rai Womens' Hospital, Hardwar; Womens' Hospital, Deoband and the Womens' Hospital, Fatehpur are now the main hospitals in the district besides dispensaries at Fatehpur, Landhaura Rankhandi and Pahansoo, Jadoodahat, Gubrada, Behat, Manglaur, Titron, Baghi and Rampur-Maniharan.

Employees State Insurance Dispensaries at Saharanpur, Roorkee and Hardwar were opened in 1955, 1961 and 1970 respectively.

Eleven Ayurvedic dispensaries were established in the district—at Jagjeetpur (1944), Sandauti-Horiya (1948), Raipur (1951), Mirpur (1954), Bhagwanpur (1956), Jadvedapada (1957), Bahadurabad (1957), Biharinagar (1957), Pansar (1961), Sakrauda (1962), and Khagarl in 1972. Five Unani dispensaries are also functioning in the district at Dhorala (opened in 1940), Kailashpur (1946), Sultanpur (1950), Ambahta (1955) and Chilkana (1972).

Besides these there were 8 Ayurvedic dispensaries at Sunderpur, Bhahre, Gangdaspur, Jaitpur, Beerakhera, Alipur, Khundana and Raisi and 3 Unani dispensaries at Panchhkna, Sona Arjunpur and Ridhi Tejpura which were run by the Zila Parishad.

A T.B. Clinic was attached to the district hospital Saharanpur, while a T.B. Isolation Beds Hospital was opened at Hardwar with 50 beds. A T.B. Sanatorium was established in 1965 at Saharanpur town with 72 beds. There are two Infectious Diseases Hospitals in the district, one at Hardwar and the other at Saharanpur. A large number of health, maternity and family planning centres have also been opened since 1947.

The deputy chief medical officer (health) is responsible for vaccination in the district and is primarily concerned with the prevention of epidemics, enforcement of sanitary measures and registration of births and deaths. He is assisted by several medical officers, sanitary inspectors, vaccinators and other miscellaneous staff.

Vital Statistics

An examination of the vital statistics of the district since the last decade of the nineteenth century reveals that the birth-rate has been higher than the death-rate although there have been greater fluctuations in the death-rate. Both have declined considerably in recent years. The figures

are not very reliable as large-scale omissions in the registration of births and deaths are apprehended but they are clearly indicative of the general trend.

The figures given below would give some idea of the situation :

Period	Birth-rate (per thousand)		Death-rate (per thousand)	
	Maximum	Year	Maximum	Year
1891-1900	52.63	1899	44.66	1894
1901-1910	43.96	1902	75.99	1907
1911-1920	46.86	1913	82.22	1918
1921-1930	48.82	1930	37.78	192
1931-1940	33.50(Mean)	—	52.70(Mean)	—
1941-1950	37.00	1941	25.40	1941
1951-1960	24.30	1958	13.00	1956

The following is a statement of the total number of births and deaths registered between 1965 and 1971 :

Year	No. of births	No. of deaths
1965	36,607	14,266
1966	35,514	15,413
1967	30,872	11,001
1968	33,870	12,306
1969	12,204	3,868
1970	11,155 (Urban area only)	3,513 (Urban area only)
1971	11,253 (Urban area only)	3,071 (Urban area only)

Infant Mortality

The rate of mortality among children below one year in age was quite alarming till 1947. During Muslim rule, female children were often killed by parents to avoid the risk of dishonour, and the practice persisted inspite of some measures adopted by emperors Akbar and Shahjahan to stop it. Under British rule the practice was made illegal.

From 1941 to 1945 the figure of infant deaths varied between 5,000 and 6,000 but by 1949 it had steadily declined to 3,010. In 1950 it rose to the phenomenal figure of 24,645 (the reason was obviously some raging epidemic of unusual ferocity). Between 1957 and 1960 it did not go beyond 3,962. The position has vastly improved in recent years, the figures being as follows :

1967	425
1968	948
1969	1,141
1970	1,538
1971	473 (only rural area)

Common Diseases

Diseases which commonly caused death were epidemics such as cholera, smallpox and plague, or fever, bowel disorders and respiratory troubles. Epidemics have, however, been largely controlled, but fevers still claim the highest percentage of the total number of deaths in the district.

Fever—The term 'fever' has wide connotations. It not only includes such diseases as malaria and typhoid but also covers many unidentified diseases of which fever is only a symptom. Till the last quarter of the 19th century malarial fever was very common in the district. Malaria epidemics have periodically occurred from times immemorial, and the district had acquired notoriety on this account. Some parts of the district, mainly the low lying lands along the Ganga and Yamuna and the forest belt in the north were the worse for the occurrence of malarial germs. On the average, the mortality from fever was 32,242 (or 86.12 per cent of the total number of deaths) during 1880 to 1890, and it further rose to 34,320 or 94.46 per cent during 1891 to 1900. In this century the worst epidemics occurred in 1906, 1907 and 1908 and took a toll of 50,041, 52,849 and 48,377 lives respectively. From 1908 to 1917 the deaths from fever declined, but in 1918 there was a great epidemic of influenza, and 74,685 people died of it. There was a decline in 1919 but in 1920 the number of deaths again rose to 43,202. During 1920 to 1930 the highest mortality from fever was 29,713 in 1926. In the fifties of this century the highest number of deaths from fever was 15,216 in 1951 and the lowest 11,715 in 1957.

With the improvement of medical and health services, deaths from fever have declined, as the following table indicates :

Year	No. of deaths due to flu
1967	8,650
1968	8,402
1969	1,645
1970	2,365
1971	1,131 (urban areas only)

Dysentery and Diarrhoea

These diseases occur in the form of bowel and stomach complaints. The incidence is attributed mostly to insanitary conditions and unsatisfactory arrangements for drinking water. Sometimes dysentery is the result of malarial fever also. With the strict enforcement of sanitary measures such as cleaning of wells, drinking water facilities, the incidence of these diseases has declined. In the last decade of the last century, the highest number of deaths from bowel complaints was 1,112 in 1893 and the lowest was 322 in 1896. During 1900 to 1910 there was a decline in the figure, because on an average about 250 persons per year died of these diseases. In the second decade of this century the number of deaths was 5,518 in 1917 which further rose to 6,243 in 1920, the lowest being 191 in 1911. During the period 1920 to 1930 the maximum mortality of 1,432 persons took place in 1928. Between 1931 to 1940 the highest number of mortality was 1,361 in 1931. In the fifties, the maximum figure was 669 in 1956 while the minimum was 397 in 1959. The number of reported deaths due to bowel disorders from 1967 to 1971 is given below :

1967	47
1968	135
1969	103 (urban areas only)
1970	171
1971	66 (urban areas only)

Respiratory Diseases—These diseases generally lead to temporary or permanent infirmities, and in a few cases they hasten death. In 1951, 694 persons died from these diseases in this district, the figure rose to 1,197 in 1956, and to 1,391 in 1957, but there was a slight downward trend in 1959 when the number was 1,128. The figures from 1967 to 1971 were as below :

1967	233
1968	340
1969	440 (urban areas only)
1970	563
1971	427 (urban areas only)

Epidemics

Smallpox, cholera and plague took a heavy toll of lives in the district till the enforcement of the Vaccination Act of 1880, which made primary vaccination compulsory while the Epidemic Diseases Act of 1897 empowered the district magistrate to remove patients to hospitals, segregate them, disinfect the infected dwellings and to evacuate infected houses and localities, etc.

Smallpox—It has been estimated that smallpox must have been prevalent for more than 1,500 years in U. P. On the basis of studies, it was discovered that there was a close relationship between absolute humidity and the prevalence of the disease; a low absolute humidity favours the disease and high one checks it. Studies conducted in the field also revealed the existence of a close relationship between the prevalence of this disease and variations in the intensities of ultra violet radiations at different times of the year at varying altitudes. The disease generally found to be on the decline after the onset of the monsoon, owing to high intensity ultra violet radiations of sunlight which restrict the transmission of infection. Though smallpox is never entirely absent in the district, its ravages are minimum, especially after the enforcement of the Act making vaccination compulsory for children in urban areas. Between 1867 and 1873, the average mortality from smallpox was about 3,000 per year but during the famine of 1877 and the following year and again in 1883 it took the form of an epidemic. From 1892 to 1900 the annual average rate of mortality from this disease was 63 while in the next six years it was no higher than 27 per year. In the first fifty years of the present century the maximum number of deaths ranged between 93 and 174, averaging at about 150, the figure for 1965 was again 174 (as in 1926), the minimum figure being 11 in 1962.

Cholera—This disease mostly occurs in a single annual wave which usually appears in March-April, suddenly increases in May and reaches its peak in June.

Fairs and festivals are the starting points for these epidemics. In the past, when there were Kumbhs and Ardh-Kumbhs at Hardwar, the epidemic broke out either in severe or minor form. Sometimes cholera is imported by pilgrims arriving from the endemic areas of cholera and these fairs become the starting point of widespread epidemic. The worst epidemic of cholera was in 1872, when 1,351 persons died from it. It again visited the district in 1887 when 1,254 fatal cases were reported. The average for ten years ending in 1890 was only 230 annually, or 0.57 per cent of the total mortality. In the next decade, the average was no more than 178 annually or 0.48 per cent of

1 *Report on the State of Health of Uttar Pradesh*, pp. 53, 58, 59, (Lucknow, 1961)

the whole. In 1892, cholera broke out at Hardwar and the great Mahabarni fair was disturbed and the people were asked to leave the place before the principal bathing day.

From 1903 to 1921 the number of deaths varied between 349 and 746 (Ardh-Kumbh fair in 1921) but started falling thereafter to 103 in 1928, rising again to 174 in 1965. The mortality from cholera has dropped considerably, mainly due to the enforcement of compulsory anti-cholera inoculations for entry to all important fairs and festivals. Other measures, which are usually undertaken are health education, disinfection of village wells with bleaching powder, disinfection of the patients' stool and vomit by the sanitary gang and the opening of infectious diseases hospital in the district. Arrangements are made for supply of piped chlorinated water and measures are taken to control flies by spraying the area in and around the perimeter of the fair with D.D.T. or other insecticides.

Plague—Plague is a formidable disease and was for the first time recorded in the State in Kumaon region in 1834-35, but according to the local traditions of that region the disease originated in 1823 in a person of the Rawal of the famous temple of Kedarnath in the snowy range, who, with the Brahmans associated with him, was smitten with it, and it was believed to be in consequence of some ceremonial omission in the performance of the temple rites. Till the end of the 19th century the identification of the disease as plague depended on clinical observation. The seasonal incidence of plague is very uniform, the highest incidence occurs in the months of February to April. The high temperatures of May and June, bring about a dramatic decline. The warm monsoon months are free. In mid-winter, in the month of December the seasonal curve begins to rise. Plague made its first appearance in the district in April 1897 during the Ardh-Kumbh fair at Hardwar, a woman pilgrim having brought it from Sind where it was then rampant. This infection did not spread far beyond Hardwar, and only thirteen persons died. A second outbreak occurred during the cold weather in the same year at Kankhal and in some villages near Hardwar, but steps were taken immediately to prevent its spread.

The main occurrence of this fatal disease was in the years mentioned below, with the number of seizures indicated :

1904	3,780
1905	7,827
1906	2,270
1907	25,052
1911	3,945
1913	1,186
1914	1,212
1915	1,258
1928	5,971

In 1934, the highest number of persons those died from plague was 734 per 1,00,000 of population. From 1935 to 1944 the maximum number was 584 per 1,00,000 of population (in 1944) and the minimum was 8 in 1939. Between 1945 and 1950 the highest number of fatal cases reported was 70 per 1,00,000 of population in 1945 and the lowest was 2 in 1949. After 1952 till 1972 not a single case was reported.

Other Diseases

Insanity, blindness, deafness, dumbness, leprosy and tuberculosis are some other diseases which have been prevalent in the district since long. Efforts made by the government to improve environmental conditions and health of people have helped to decrease the incidence of these diseases.

The district had two leper asylums, one at Saharanpur and other at Roorkee, which were closed in the thirties of the present century due to lack of funds. At present Seth Baldeo Das Bajoria Hospital and a private managed leper asylum at Roorkee provide treatment for this disease. The Gandhi Shatabadi Kamla Devi Bajoria Eye Hospital and Aligarh Eye Hospital, Saharanpur, provide expert treatment for eye diseases such as cataract, glaucoma and trachoma. Patients of tuberculosis are treated at the T.B. Sanitorium, Saharanpur, the T. B. Clinic attached to district hospital, Saharanpur and the T. B. Isolation Beds Hospital, Hardwar. Although no special units providing treatment for deafness and dumbness exist in the district, the hospitals provide the necessary treatment

Medical and Public Health Organisation

The medical and public health departments of the State were amalgamated in 1948 under a directorate to control the allopathic, the Ayurvedic and the Unani institutions and services. In July 1961, a separate directorate was established for Ayurvedic and Unani dispensaries. Local administration however, remains in the charge of deputy chief medical officer (health).

The chief medical officer is the head of the entire medical set up in the district. He is overall in charge of the State hospitals, allopathic and homeopathic dispensaries.

The chief medical officer is assisted by three deputies, designated as deputy chief medical officer (health), deputy chief medical officer (medical) and deputy chief medical officer (family planning). The last one looks after the activities of family planning and organizes family planning camps. Sanitary inspectors look after the environmental sanitation work in each development block and supervise work relating to control and prevention of epidemics and

impart health education to the villagers. An idea of the public health activities undertaken in the district in the Second Five-year Plan (1956 to 1961) can be had from the following :

Work	Achievement
No. of wells constructed	143
No. of old wells repaired	690
Pucca drains constructed (km.)	267
No. of hand pumps installed	328
No. of bathrooms constructed	717
No. of sanitary latrines constructed	169

Hospitals

There are in the district three State hospitals for men and five for women, besides railway, police and jail hospitals. The Seth Baldev Das Bajoria Hospital, Saharanpur has 70 beds for men and 50 for women. The Civil Hospital, Roorkee has 24 beds for men, and G.D. Hospital, Hardwar has 24 beds for men.

Among female hospitals, the womens' hospital Saharanpur has 56 beds, that in Roorkee, has 10 beds and the Chain Rai Women Hospital, Hardwar, has 20 beds. Womens' hospitals at Deoband and Fatehpur have 4 and 6 beds respectively.

The T.B. Sanitorium, Saharanpur, has 72 beds and T.B. Isolation Beds Hospital, Hardwar, has 50 beds. The railway hospital at Saharanpur has 14 beds, the police hospital has 30 beds and the jail hospital 20 beds. Convicts suffering from different diseases are treated at the jail hospital. Lepers are also treated at Seth Baldev Das Bajoria Hospital, Saharanpur, though there is a leper asylum at Roorkee, managed by a private agency. The Seth Baldev Das Bajoria Hospital, Saharanpur, Civil Hospital, Roorkee General Disease Hospital, Hardwar and Womens' Hospital, Saharanpur, are equipped with X-ray plants. The following gives an idea of the staff provided and the patients treated in the State hospitals in 1971 :

Hospitals	Staff		No. of patients treated	
	No. of doctors	Others	Indoor	Outdoor
1	2	3	4	5
Seth Baldev Das Bajoria Hospital, Saharanpur	11	105	6,361	1,76,732
Civil Hospital Roorkee	1	23	460	16,548
General Diseases, Hospital, Hardwar	2	15	671	29,081

[Continued]

1	2	3	4	5
Womnes' Hospital, Saharanpur	1	23	31,165	70,482
Womens' Hospital, Roorkee	1	5	667	7,343
Chain Rai Women Hospital, Hardwar	1	10	1,585	8,212
Womens' Hospital, Deoband	1	5	10	1,598
Women's Hospital, Fatehpur	1	6	Nil	4,645
T.B. Beds Hospital, Hardwar	1	13	295	917

Dispensaries

Allopathic—The following statement gives details about the staff, beds and the number of patients treated at the allopathic dispensaries in the district in 1971 :

Dispensaries	Staff		No. of beds	No. of patients treated	
	No. of doctors	Others		Indoor	Outdoor
Employees State Insurance Dispensary, Nehru Market, Civil Lines, Saharanpur	8	17	—	—	1,67,526
Employees State Insurance Dispensary, Roorkee	1	10	—	—	20,084
Employees State Insurance Dispensary, Hardwar	5	18	—	—	1,67,526
Male Dispensary, Fatehpur	1	3	4	14	19,916
State Dispensary, Landhaura	1	3	4	9	4,978
State Dispensary, Rankhandi	1	3	4	—	4,882
State Dispensary, Pabansso	1	3	—	—	3,815
Nagal Dispensary	1	3	4	122	6,411
Sarsawa Dispensary	1	3	4	—	11,259
Laksar Dispensary	1	3	4	71	12,185
Modhpur Dispensary	—	—	—	—	—
Gangoh Dispensary	1	4	4	108	12,936
Badhi Dispensary	1	3	4	—	11,283
Bahadurabad Dispensary	1	3	4	15	4,385
Jwalapur Dispensary	—	—	—	—	—
Nakur Dispensary	1	3	4	47	6,560
Titron Dispensary	1	3	4	9	1,475
Rampur Dispensary	1	3	6	28	21,031

[Continued]

Dispensaries	Staff		No. of beds	No. of patients treated	
	No. of doctors	Others		Indoor	Outdoor
Bebat Dispensary	1	3	6	—	9,192
Nanauta Dispensary	1	3	4	1	7,626
Deoband Male Dispensary	1	3	4	194	8,338
Bhagwanpur Dispensary	1	2	4	—	4,768
Muzaffarabad Dispensary	1	3	4	1	5,876
Sadauli Kadim Dispensary	1	3	4	—	6,266
Narsan Dispensary	1	3	4	4	8,860
Nawarka Dispensary	1	2	4	—	4,543
Sunhati Karkan Dispensary	1	3	4	—	14,913
Jadiudahat Dispensary	1	3	4	—	1,696
Jhabrada Dispensary	1	3	—	—	6,527
Manglaur Dispensary	1	3	12	30	16,267
Baghi Dispensary	1	3	—	—	9,475
Jarodajat Dispensary	1	3	—	—	10,415

Ayurvedic and Unani—There are eleven Ayurvedic and five Unani dispensaries in the district under the control of deputy chief medical officer (health), and eight Ayurvedic and three Unani dispensaries are under Zila Parishad, Saharanpur. Each Ayurvedic dispensary has one *vaid* in charge while each Unani dispensary is manned by a hakim. The total number of patients treated by these dispensaries during 1972 was 25,633.

Primary Health Centres

In order to extend medical facilities and improve health standards of the rural population, the government has established primary health centres in every development block of the district. There were 16 such centres in 1972. Each centre is manned by a medical officer, who is assisted by para-medical and health staff consisting of pharmacists, health inspectors, health visitors, smallpox inspectors and supervisors, and family planning workers. Each centre generally has a four bedded ward for indoor patients. At the district level the deputy chief medical officer (health) controls their functions,

Maternity and Child Welfare

Maternity and child welfare activities in the district, as else where in the State, have come a long way since the days of the untrained *dai* and the village paediatrician. Lack of facilities for ante-natal and post-natal care contributed largely towards higher incidence of mortality among women and children till the late forties of this century.

Since 1958, the government started establishing maternity and child welfare centres in the district. They numbered 16 in 1972 (one each in a development block), attended by midwives and trained *dais*. Three to four subcentres are also attached to each such centre, and are looked after by *dais*. Since 1973, a new scheme of prophylaxis of pregnant women and children against nutritional anaemia and other common diseases has also been taken up.

These centres are equipped with aids and devices for educating ladies in planned parenthood. Family planning literature and contraceptives are also made available free of cost to married couples.

The following statement gives the number of cases conducted by midwives and *dais* of these centres in the district in 1970, 1971 and 1972 :

Year	Cases conducted by midwives	Cases conducted by <i>dais</i>
1970	4,813	2,239
1971	2,577	3,638
1972	3,205	3,190

A training centre for midwives and nurses was established in 1956 in Saharanpur city, with a two year course of training and having 30 seats. Each trainee is given a stipend of Rs 70 each month during the training period. Minimum qualification for entrants is eighth class pass. There is also a provision for the training of *dais* at each maternity centre. The period of training varies from six to nine months and each trainee is given a stipend. The trainees are required to be literate.

Vaccination

The deputy chief medical officer (health) is in charge of the work of vaccination in the district. He is assisted by sanitary inspectors and a team of vaccinators. The work of vaccination has been intensified since 1963, when the national smallpox eradication scheme was launched. Though the Vaccination Act of 1880 was in force in the district from its inception, it could not be implemented fully due to lack of co-operation by the public.

Under this Act vaccination is not compulsory in rural areas, except for short periods during the outbreak of epidemics. Mothers are advised during the post-natal period to have the child vaccinated as early as possible after the child is two or three months old.

The following statement gives the number of persons vaccinated during the years 1962 to 1972 :

Year	Total Number of persons vaccinated	No. of primary vaccination		No. of revaccination	
		Successful	Unsuccessful	Successful	Unsuccessful
1962	4,44,804	47,585	2,314	1,39,923	36,001
1963	6,43,153	39,639	4,123	1,71,636	2,40,322
1964	2,52,807	32,857	883	54,436	1,04,129
1965	3,56,794	77,697	2,496	83,101	1,14,338
1966	2,55,227	86,118	3,585	43,940	67,176
1967	1,80,809	53,996	2,472	26,828	59,405
1968	2,17,726	74,363	2,009	29,878	64,639
1969	2,18,230	75,267	12,550	23,805	1,06,608
1970	2,67,606	82,530	7,385	23,385	1,54,306
1971	1,73,227	72,041	1,167	27,414	72,605
1972	11,18,811	90,112	2,720	2,17,699	27,318

Eye-Relief

Cataract, glaucoma and trachoma are the most common diseases of eye in the district. The Gandhi Shatabdi Kamla Devi Bajoria Eye Hospital, Saharanpur and the Aligarh Eye Hospital, Saharanpur are the two main hospitals in Saharanpur, who perform operations and provide other treatment for diseases of the eye. The following statement gives the idea of the work done by these hospitals :

Name of hospital	Year	Patients treated
Gandhi Shatabdi Kamla Devi Bajoria Eye Hospital, Saharanpur	1972	13,172
Aligarh Eye Hospital, Saharanpur	1972	580

Prevention of Food and Drug Adulteration

The government public analyst analyses the samples taken by the sanitary inspectors. Suitable action is taken against offenders under the Prevention of Food Adulteration Act, 1954. The deputy chief medical officer (health) is the licensing authority for food establishments and drug stores in the district. He is assisted by a drug inspector in his task to check the adulteration of drugs. They are further required to ensure the due observance of Indian Drugs Act, 1940, and Drug Rules of 1945 by the retailers, wholesale dealers and manufacturing concerns.

Year	No. of sample collected		No. of cases found unadulterated		No. of cases prosecuted		No. of cases ending in conviction	
	Food	Drug	Food	Drug	Food	Drug	Food	Drug
1969	394	110	86	17	165	3	93	2
1970	542	38	139	8	127	2	32	—
1971	702	76	86	5	129	1	52	—

National Malaria Eradication Programme

The national malaria eradication programme was launched in the district in 1958-59 and the malaria maintenance operation (a part of malaria eradication scheme) was started in 6 primary health centres from September 1, 1966 and covered three more primary health centres from November, 1967.

Under the national malaria eradication programme each unit has to pass through four phases viz., preparatory, attack, consolidation and maintenance. The preparatory phase was not actually launched as the national malaria control programme was already in operation in the district. In the next phase only spray operations are carried out in all the roofed structures twice a year from May to September. In 1960-61 surveillance procedures were launched in the district and were carried out concurrently with spray operations. House-visitors visited houses twice a month in search of fever cases, the blood slides of fever cases detected were collected and a presumptive treatment administered. The attack phase remained in operation in the district from 1958 to 1964. When some parts of the district entered into the consolidation phase and in 1965 the entire district was covered under this phase. In the maintenance phase the national malaria eradication programme became part of the district health scheme and is now under the overall charge of the chief medical officer, who is incharge of all the public health activities in the district. At present out of 16 primary health centres 9 are under the phase.

The deputy chief medical officer (health) assisted by his staff looks after the programmes of malaria eradication from the start of surveillance work. The incidence of malaria has been gradually decreasing as the following statement indicates :

Year	Fever cases detected	No. of persons given treatment
1968	1,01,724	94,173
1969	1,17,008	1,07,222
1970	1,24,905	1,16,626
1971	1,13,355	1,02,442
1972	1,07,334	99,780

Family Planning

The family planning scheme was introduced in the district somewhere in the fifties of this century but a separate office under the district family planning officer was established only in 1967, when concrete steps were taken to implement the programmes of family planning.

At present there are mobile units under the control of male and female doctors, who offer suitable help and guidance to the interested persons and perform vasectomy and tubectomy operations. From 1956 to 1972 the district was backward in the field of family planning, as there were only 10 persons per 1,000 population who had vasectomy operations and even in 1973 the figure stands at 15 per 1,000 population. The deputy chief medical officer (family planning) is overall in charge of such operations. Medical officers incharge of primary health centres also perform vasectomy operations.

Efforts are made to popularise family planning through films, placards, posters and by personal contacts. The achievement in family planning work in recent years is given below :

Year	Vasectomy	I. U. C. P. Insertions (loop insertions)
1965-66	3,039	845
1966-67	1,285	2,873
1967-68	2,790	3,134
1968-69	3,058	2,099
1969-70	1,564	2,196
1970-71	1,707	3,131
1971-72	2,329	2,084
1972-73	7,366	521

Diet and Nutrition

The dietary habits of the people generally depend upon the geographical situation of the place and economic condition of the inhabitant. The climatic and soil condition of district being conducive to the growth of various food-grains, vegetables and fruits etc., the people of district Saharanpur generally consume nutritious food which is adequate except for a slight deficiency in vitamin A.

Wheat and rice as staple food are consumed at an average rate of 365 gm. and 136 gm. respectively per capita per day. A small percentage of families consume cheap grains also, in which maize dominates and the average daily consumption of this grain is 100 gm. The traditional practice of hand pounding and par-boiling of paddy is disappearing. The rice is washed several times before cooking and the rice water (*mar*) is also discarded, and very few families use rice water in vegetable or *dal*. The majority of the families strain out 25-50 gm. of bran per kg. of flour and very few families consume mixture of cereals. Total daily consumption of cereal is 595 gm. against the suggested amount for the balanced diet of 475 gm. for a moderate worker. This amount is slightly higher and provides 2,920 calories against the recommended allowance of 2,800 calories. The consumption of pulses is 50 gm. per head per day, the recommended quantity being 80 gm. for vegetarians. Among pulses *urd*, *moong* and lentils (*masoor*) are commonly consumed. The per capita consumption of green leafy vegetables per day is only 29 gm. as against 125 gm. required normally. The common green leafy vegetables consumed are mustard leaves, amranth, *lahi*, radish leaves, funigreek (*methi*), *kulpha* spinach etc. The preference is for mustard leaves. The low consumption of green leafy vegetables has lowered vitamin A content of the diet. About 75 gm. of non-leafy vegetables are consumed daily per capita as against 75 gm. These include cauliflower, cabbage, *shaljam*, *knol khol*, *singri* tomatoes, carrot, brinjals and *kakri* giant capsicum in winter and bitter ground, gourd, *chichanda*, *tori*, *lauki*, *lobia*, pumpkins, *bhindi* and ridge guard in summer. A special variety of cucumber (*khira*) is also consumed. Among the root vegetables, potato, calocasia, onion, gaderi, yam, and sweet potato are consumed. The average consumption of such vegetables is 90 gm. against the suggested amount of 75 gm. Vegetables are cooked in vegetable oil by most of the families. The average consumption of ghee is 30 gm. and oil (mustard) is 8 gm. The total of 38 gm. of fat consumption is satisfactory though the amount suggested is 40 gm. The average daily consumption of fruits is adequate, the per capita per day consumption and the recommended amount being 30 gm. The common fruits consumed are mango, guava, plums, custard apple, oranges, *leechi*, papaya, *lokat*, *alucia* etc. Such fruits are locally produced in abundance in rural areas.

The average daily consumption of milk varies from 80 gm. to 580 gm. against the recommended allowance of 200 gm. for vegetarians and 100 gm. for non-vegetarians. Curd and *matha* are also consumed by a substantial number of people. The average consumption of meat and fish also varies from 15 to 26 gm. per capita per day against the recommended 30 gm. Eggs are reportedly consumed by fifty per cent of families out of which twenty per cent of families reared birds. The per capita daily consumption of sugar and jaggery varies from 30 to 50 gm. with an average of 40 gm. a day which is equal to the recommended amount. Some of the families consume 20 gm. of ground-nut per day.



CHAPTER XVII

OTHER SOCIAL SERVICES

Labour Welfare

After independence in 1947, the government took more interest in promoting the welfare of the labour class. Many existing laws were amended and several were enacted thereafter. Eleven labour laws were operating in the district in 1972. They were the Indian Boilers Act, 1923, the Workmen's Compensation Act, 1938, the U. P. Maternity Benefits Act, 1938 and the Industrial Employment (Standing Orders) Act, 1947, the U. P. Industrial Disputes Act, 1947, the Factories Act, 1948, the Minimum Wages Act, 1948, the Motor Transport Workers Act, 1961, the Uttar Pradesh Industrial Establishment (National Holidays) Act, 1961, the U. P. Shops and Commercial Establishments Act, 1962 and the Payment of Bonus Act, 1965.

In 1973, as many as 2,991 contraventions were detected in the district. Their details are given below :

Act	No. of contravention	No. of prosecution
Industrial Employment (Standing Orders) Act, 1947	27	—
Factories Act, 1948	40	1
Minimum Wages Act, 1948	354	16
Motor Transport Workers Act, 1961	13	—
U. P. Industrial Establishment (National Holidays) Act, 1961	10	—
U. P. Shops and Commercial Establishments Act, 1962	2,547	—
Total	2,991	17

Labour Welfare Centres

The district has three labour welfare centres two in Saharanpur city and one at Roorkee. The main purpose of these centres is to provide entertainment and facilities for indoor and outdoor games to the workers. They also run libraries-cum-reading centres. Sewing classes are also held at these centres for women and children. The two centres at Saharanpu also provide medical facilities to the workers.

Industrial Housing Scheme

Under the State government's industrial housing scheme to provide houses to the labourers at cheap rent in Saharanpur city 792 houses have been constructed. These houses are equipped with flush latrines, electricity and water. The government spends a sum of Rs 8,000 on the repairs and maintenance of this colony.

OLD-AGE PENSION

The old-age pension scheme was introduced in the district on 1st December, 1957, to provide pension to destitute persons of 70 years or more who have no means of subsistence, are unable to earn their livelihood and have no relations bound by custom or usage to support them. The scheme was liberalised in 1962 and 1965 to include persons with a monthly income of Rs 15 and the age of eligibility in the case of widows, cripples or persons whom physical infirmity had rendered totally incapable of earning a living was reduced from 65 to 60 years the amount of pension was also increased from Rs 15 to Rs 20 per month and again from January, 1972 it became Rs 30 per month. The benefits of this scheme are not available to beggars, mendicants and inmates of poor houses.

The pension is sanctioned by the labour commissioner after verification of particulars and recommendations of the district authorities. Since the starting of the scheme in the district the number of recipients of pension upto 30th June, 1973 was 777, of whom 367 were men and 410 women, the tahsilwise details being as follows :

Name of tahsil	Male	Female	Total
Saharanpur	68	79	147
Nakur	12	9	21
Deoband	48	31	79
Roorkee	26	78	104
Total	154	197	351

PROHIBITION

The government has taken measures to educate the public against the use of liquor and other intoxicants, by means of mass contacts and social pressures through the prohibition publicity and social uplift organization. The prohibition work in the district is being looked after by the prohibition and social uplift officer, posted at Meerut.

The district has not been declared a dry area except for Hardwar town in tahsil Roorkee. A prohibition board was constituted in the district to advise on the methods of improving detection and prevention of excise crimes. The district temperance society, constituted in 1957, carries out temperance and prohibition programmes. The president of the Zila Parishad, Saharanpur is the chairman and the district excise officer its secretary with an elected vice-chairman and joint secretary.

In 1971, the Zila Maddymanishedh Evam Samaj Utthan Samiti was formed, the district magistrate being its ex officio chairman and the excise officer the secretary and treasurer. A vice-chairman, joint secretary and an executive committee consisting of 15 members are elected by the Samiti from among its members after every three years. It exerts moral and social pressure on people to dissuade them from drinking liquor. One prohibition organiser and one honorary *pracharak* have been appointed, and they hold camps and stalls in fairs and exhibitions for propagating prohibition and to wean people from the habit of indulgence in intoxicants in general and spirituous drinks in particular. Boards depicting the disastrous effects of drugs and liquor have been set up at prominent places in the district. The Arya Samaj and the Gandhi Smarak Nidhi also help in the promotion of temperance and prohibition.

ADVANCEMENT OF THE SCHEDULED CASTES AND OTHER BACKWARD CLASSES

In 1950, the State Harijan Sahayak Department was set up to formulate and implement schemes for the welfare of members of the Scheduled Castes, Scheduled Tribes, Other Backward Classes and Criminal Tribes (later to be known as de-notified tribes). In 1957, a district Harijan welfare officer was posted in the district whose designation was changed to Harijan and social welfare officer in 1961, when the Harijan Sahayak and Social Welfare departments were integrated. His main functions are to watch the interest of the members of Scheduled Castes, implement the schemes formulated by the government for their welfare and amelioration of their lot.

Members of the Scheduled Castes who were considered as belonging to the Depressed Classes during the British rule, today have been mostly outcastes of the local society. Social workers have always striven to better their lot, but the alien government took little interest in their welfare. A half-hearted beginning was made in 1930 when a scheme was formulated for the award of stipends to students belonging to the Scheduled Castes. However, it was only with the advent of Independence that concrete steps were taken for their amelioration, and in 1947 the U. P. Removal of Social Disabilities Act was passed which ensured to the members of such castes the unrestricted enjoyment of social and religious liberties. The Untouchability (Offences) Act, 1955 has rendered practice of untouchability an offence punishable under the Act. It replaced the corresponding State Act of 1947,

The State Government also threw open all avenues of employment to members of the Scheduled Castes and major steps were taken for their adequate representation in services. In 1944, the upper age limit for recruitment of Scheduled Castes candidates to civil posts was relaxed upto 3 years over the prescribed limit. In 1953, the reservation for Scheduled Castes in government service was further raised from 10 to 18 per cent. In 1955, the upper age limit for Scheduled Caste candidates was raised upto 5 years for gazetted as has already been done for non-gazetted posts in 1952. Government keep a watch over the progress in recruitment of the Scheduled Caste candidates to various posts and have time and again, emphasised that the prescribed percentage for filling the posts by Scheduled Caste candidates must be achieved. The Scheduled Caste candidates are given concession in application and examination fees while applying for any post.

The government also freely grants advances and loans to members of Scheduled Castes for various purposes, such as agriculture industries, construction of houses, sinking or boring of wells for drinking purposes etc.

The following statement gives the amount of grant advanced under various schemes during the III and IV Five-year Plans :

Scheme	III Five-year Plan (Amount in rupees)		IV Five-year Plan (Amount in rupees)	
	Scheduled Castes	Denotified Tribes	Scheduled Castes	Denotified Tribes
Development of cottage industries	47,700	31,300	94,500	7,000
Promotion of agriculture	89,840	36,740	58,003	3,000
Housing	31,500	39,000	1,07,000	9,000
Drinking water facilities	35,500	—	1,28,000	—

In 1972-73 a sum of Rs 17,000 was spent by the State Government on the construction of houses, Rs 36,000 on the digging of wells and provision for drinking water for the persons belonging to the Scheduled Castes and Other Backward Classes. In the same year, Rs 29,000 were provided for the promotion of cottage industries and Rs 18,000 for the development of agriculture.

Financial assistance has also been provided by the Central Government to the Denotified Tribes in the district as part of an upliftment programme. In the year 1972-73, a sum of Rs 3,000 was granted for the construction of houses, Rs. 2,000 for the promotion of cottage industries and Rs. 1,000 for agricultural development.

For the desired social and economic transformation of the Scheduled Castes and Other Backward Classes, it is essential to provide adequate educational facilities. A programme for giving scholarships to the students of the backward communities for education has been launched by the State and Central Governments. In the year 1972-73 the State Government disbursed a total amount of Rs 2,12,602 as scholarship and a total number of 2,779 students of the Scheduled Castes and Other Backward Classes were benefited in the district. Similarly, the Central Government also gave an amount of Rs 8,54,223 as scholarship to 1,841 students during the same year.

CHARITABLE ENDOWMENTS

Trusts

There were 18 charitable endowments in the district in 1971 which have been registered under the Charitable Endowments Act, 1890, with the treasurer, charitable endowments, U. P. Most of these have been established with investments ranging from Rs 1,000 to Rs 3,500. Their aims and objects are to award scholarships and medals to meritorious students. Details of these trusts are given in the following statement :

SL No.	Name of trust	Date of registration	Investment (Rs)	Income in (Rs) 1970-71	Aims and objectives
1	2	3	4	5	6
1.	Thomason College Testimonial Fund Endowments	13-9-1892	10,400	376	To award gold medals and scholarships to the meritorious students
2.	Vijayanagar Scholarship in the Thomason Civil Engineering College	30-3-1893	1,000	29	To give awards to the meritorious students
3.	Fairley Memorial Fund	1-4-1908	500	15	To award silver medals to the meritorious students
4.	Calcoth-Reilly Memorial Fund	12-1-1909	1,800	53	To award scholarships to the meritorious students
5.	Pyare Lal Educational Fund	14-7-1911	18,500	544	To award scholarships to the meritorious students
6.	Hardinge Scholarship Endowment Trust Fund	6-9-1913	1,000	29	—

(Continued)

1	2	3	4	5	6
7.	General Apprentice Fund : Roorkee Workshop	18-5-1916	3,800	112	To help the injured workers of Roorkee Canal Foundry and Workshop
8.	Bajjnath Scholarship Fund	17-12-1918	3,500	103	To award scholarships to the meritorious students
9.	Francis Shamier Scholarship Fund	24-7-1918	1,600	47	To award scholarships to the meritorious students
10.	Ganga Devi Scholarship Endowment Trust	14-1-1921	600	18	To accord financial help to students
11.	Sushila and Mitra Memorial Silver Medal Fund	11-9-1922	600	18	To award silver medals
12.	Ram Chandra Scholarship Endowment Trust	21-4-1923	400	12	To award scholarships
13.	Sullivan Scholarship and Medal Endowment Fund	31-10-1927	2,900	85	To award scholarships to the meritorious students
14.	Sadar Dispensary Fund, Roorkee	7-5-1931	3,200	94	For the maintenance of Sadar Dispensary, Roorkee
15.	Government Airmen Shamier High School Trust Fund	15-5-1936	21,300	626	To award scholarships to the meritorious students
16.	Lala Puranmal Medal Endowment Trust Fund	21-7-1938	500	15	To award silver medals
17.	Shielpriya Memorial (Swimming) Trust	17-8-1948	1,500	44	To award Shielpriya Memorial Challenge Trophy to the meritorious student swimmer
18.	Rishikul Ayurvedic College, Hardwar	19-1-1962	Immovable and movable property	—	To promote education through the medium of Rishikul Ayurvedic College, Hardwar

Waqfs

There are 655 Sunni *waqfs* (trusts) in the district registered with the Sunni Central Board of Waqfs, Lucknow. The annual income accruing from these *waqfs* for the year 1971-72 is Rs 2,16,352 and total expenditure for the same year is Rs 2,10,000.

Among the more notable *waqfs* are the Molvi Mohommad Qasim Nanutai (founded in the years after the 1857 struggle), the Jama Masjid (founded during the reign of Shahjahan), the Hazrat Qutub Alam Sheikh Abdul Qudoos Shah, Gangohi and the Dargah Makhdoom Alaudin Ali Ahmad Sabir Saheb (founded around the year 1719). The main aims of these *waqfs* are the maintenance and proper upkeep of the tomb, shrine or the mosque, celebration of religious festivals and promotion of education among Muslims.



CHAPTER XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Historical Retrospect

In the ancient and medieval periods the zeal of public spirited persons was mainly confined to works of public utility, charity and philanthropy-like construction of dharmshalas, wells, halting places, places of worship, and organising of *langars* for the poor, and religious gatherings and discourses, specially on holy dates, at pilgrim centres like Hardwar. In 1913, the proposed diversion of the main current of the Ganga by constructing new head-works of Hardwar touched the chord of public opinion (especially Hindus) on the raw. It was feared that the new construction would fetter the flow of the river, particularly to the sacred Har-ki-Pairi pool. The growing resentment threatened to assume alarming dimensions, necessitating the visit of the viceroy and lieutenant governor to the district in 1914 and again in 1916. An amicable settlement was subsequently reached at a conference which was represented by prominent Hindus of the district on one hand and Charles Meston, the lieutenant governor on the other. The people of this district did not lag behind in participating in movements for the freedom of their country.

After independence there has been a continuous progress in the process and mechanism of democracy, the general election to the State, Central Legislatures, village panchayats, and other local self-governing bodies.

Representation of District in Legislatures Retrospect

The Government of India Act, 1935, which came into operation on April 1, 1937 and introduced provincial autonomy for the first time was a step in the direction of establishing elections of 1937 to the State Legislative Assembly; all the seats were won by the candidates of the Indian National Congress party. The popular ministry constituted in 1937 resigned in November, 1939 on the issue of the declaration of war against Germany by the Government of India. The next elections to the Legislative Assembly were held in 1945, and the Congress party again captured all the seats. The provincial legislature started functioning from April 1, 1946.

After the formation of popular interim government at the Centre the communal situation in the district like some other places in the country deteriorated and there was a holocaust of bloodshed, amidst which the British government announced its momentous decision to withdraw from India. On August 15, 1947, India became free and on January 26, 1950 it became a republic.

STATE LEGISLATURE

Vidhan Sabha (Legislative Assembly)

On the basis of the Constitution of India, framed by the Constituent Assembly and enforced on January 26, 1950, the first general elections were held in 1952, the district was divided into seven assembly constituencies, viz., Roorkee (East), Roorkee (South), Roorkee (West)-cum-Saharanpur (East), Saharanpur city, Deoband, Saharanpur (North-West)-cum-Nakur (North) and Nakur (South). Two of these, Roorkee (West)-cum-Saharanpur (North) and Deoband, were double-member constituencies with one seat in each reserved for a candidate of the Scheduled Castes, the rest being single-member constituencies. There were 66 candidates for the nine seats, all of which were contested by the Indian National Congress, four candidates each belonged to the Socialist Party of India and the Akhil Bhartiya Jan Sangh, two each to the Ram Rajya Parishad.

For the elections of 1957, the number of constituencies remained the same, only the names of some were changed. They were named as Jwalapur, Roorkee, Deoband, Saharanpur, Muzaffarabad, Haraura and Nakur assembly constituencies. Deoband and Haraura were double-member constituencies with one seat reserved for the Scheduled Castes candidate while the rest were single-membered. There were 45 contestants for the nine seats, all of which were contested by the Congress. Six candidates belonged to the Bhartiya Jan Sangh, four to the Praja Socialist Party and two to the Ram Rajya Parishad. Those who contested as independents numbered 24. The Congress won eight seats while one seat was annexed by an independent.

In the third general elections held in 1962, the district was divided into nine single-member assembly constituencies two being reserved for the Scheduled Castes Nakur, Sarsawa (Scheduled Castes), Muzaffarabad, Saharanpur, Haraura, Nagal (Scheduled Castes), Deoband, Jwalapur, and Roorkee. The Indian National Congress contested all the nine seats, eight candidates belonged to the Bhartiya Jan Sangh, six to the Socialist Party of India, four to the Swatantra and three to the Praja Socialist Party. Twenty-two persons contested as independent candidates. The Congress was victorious in seven seats and two seats went to the independents.

For the fourth general elections of 1967, the district was divided into nine single-member constituencies, names of which were, Nakur, Sarsawa, Nagal (Scheduled Castes), Deoband, Haraura (Scheduled Castes), Saharanpur, Muzaffarabad, Roorkee and Laksar. There were 61 contestants for the nine seats. The Indian National Congress put up candidates for all the seat, the Akhil Bhartiya Jan Sangh for seven, the Swatantra for six, the Samyukta Socialist Party for four and the Republican Party of India for two seats. There were 28 candidates who contested as independents. The Indian National Congress bagged seven seats, one went to the Samyukta Socialist Party and one to an independent.

The Vidhan Sabha was constituted after the general elections held in 1967. Due to defections by a number of members from the Congress legislature party in the Vidhan Sabha the government had to resign. The Bhartiya Kranti Dal (formed out of defectors from the Congress), the Akhil Bhartiya Jan Sangh, the Samyukta Socialist Party, the Praja Socialist Party, the Communist Party of India and some independents formed a ministry. This group could, however, not act up to its basic conceptions of unity, co-operation, integrated action and common approach to solve the problems of the State, and due to mutual rivalries and leg pulling jealousy, distrust of each other, and contrary pulls and pressures in the diverse direction culminated in the dissolution of the coalition government on February 25, 1968. The administration of the State was assumed by the President of India. A mid-term election was held in 1969, the constituencies in the district were the same as in the preceding general election. There were 66 contestants for the nine seats, the Congress and the Bhartiya Kranti Dal each setting up candidates for all the nine seats, the Akhil Bhartiya Jan Sangh for seven, the Samyukta Socialist for six, the Uttar Pradesh Kisan Mazdoor Party for four, the Swatantra for three, the Republican for two and the Praja Socialist, the Proutist Block and the Communist Party of India for one seat each. Independent candidates numbered 23. The Congress party came out in a majority, though reduced, being able to secure only five out of the nine seats. Out of the remaining four seats two went to the Bhartiya Kranti Dal which came into existence in the district for the first time and one each to the Akhil Bhartiya Jan Sangh and an independent. The new Vidhan Sabha was constituted on February 26, 1969, but the story of 1967 was repeated and the coalition government, which was formed was again dissolved as a result of intra-party conflicts and defections. A short spell of President's rule again followed in the State from October 1, 1970 to October 18, 1970. The government formed by the Congress (R) functioned till the voluntary resignation on June 13, 1973. Another spell of President's rule followed up to November 8, 1973 when the Congress (R) again formed a government.

The figures of the total electorate of the assembly constituencies in the district and the number of valid votes polled in these elections were as follows :

Year	Total electorate	Total number of valid votes
1952	6,58,500	4,77,382
1957	7,11,545	6,80,683
1962	7,57,021	4,12,520
1967	9,02,940	5,44,703
1969	9,40,225	5,97,018

The statement below gives the figures of valid votes polled by the candidates of political parties and independents at the last three elections held in 1962, 1967 and 1969 :

Party/Independents	1962	1967	1969
Congress	1,82,859	2,10,895	1,98,484
Jan Sangh	52,878	61,118	59,232
Socialist	36,798	—	—
Swatantra	31,323	12,381	6,475
Praja Socialist	1,756	7,356	1,524
Samyukt Socialist	—	58,075	35,500
Republican	—	9,105	19,589
Communist	—	—	9,778
Bhartiya Kranti Dal	—	—	1,60,137
Proutist Block	—	—	218
Kisan Mazdoor	—	—	40,440
Independents	1,15,906	1,85,773	65,641

Vidhan Parishad (Legislative Council)—The district at present forms part of the Saharanpur-cum-Dehra Dun Local Authorities', Uttarakhand-cum-Kumaon Teachers' and Uttarakhand-cum-Kumaon Graduates' constituencies for biennial elections to the Vidhan Parishad. No resident of the district is a member of the Vidhan Parishad from any of these constituencies.

UNION LEGISLATURE

Lok Sabha (House of the People)

In the general elections to the Lok Sabha held in 1952, the district was part of two parliamentary constituencies, the Saharanpur District (East)-cum-Muzaffarnagar District (North) constituency and the Dehra Dun District-cum-Bijnor District (North-West)-cum-Saharanpur District (West) constituency. The first was a double-member constituency with one seat reserved for a person belonging to the Scheduled Castes, the second being a single-member constituency. There were ten contestants for the three seats, three each belonging to the Indian National Congress and the Socialist Party of India, two to the Bhartiya Jan Sangh, and one to the Ram Rajya Parishad and one independent candidate. All the three seats were, however, won by the Congress.

In the elections of 1957 there was no change in the constituencies. There were nine contestants for the two seats two belonging to the Indian National Congress, one each to the Bhartiya Jan Sangh, Ram Rajya Parishad and Praja Socialist Party and four persons contesting the elections as independents. The Indian National Congress won both the seats.

In the elections held in 1962, the major portion of the district was included in the single-member Saharanpur (Scheduled Castes) parliamentary constituency. Some portions of the district formed part of the Kairana and Dehra Dun parliamentary, single-member, constituencies. There were five contestants for the seat of the Saharanpur (Scheduled Castes) constituency, one each belonging to the Indian National Congress, the Bhartiya Jan Sangh, the Socialist Party of India and the Swatantra Party and one person contesting as an independent. The seat went to the Congress.

The position of the parliamentary constituencies remained the same at the general elections of 1967. There were six contestants for the single seat, one each belonging to the Indian National Congress, the Akhil Bhartiya Jan Sangh, the Communist Party of India, the Samyukt Socialist and the Swatantra Party. One person contested as an independent. The Congress won the seat.

The Lok Sabha constituted after the elections of 1967 was dissolved on December 27, 1970 by a proclamation of the President of India and fresh polls were ordered. The mid-term parliamentary poll was completed in March, 1971, and the new Lok Sabha was constituted in the same month. A notable feature of this election was that the Congress which had in 1969 split up into two distinct parties, one led by Sri Jagjiwan Ram named as Congress (J) now known as Congress (R) and the other led by Sri Nijalingappa known as Congress (N) now known as Congress (O) contested all the seats. There were four candidates for the Saharanpur (Scheduled Castes) parliamentary seat, one each belonging to the Congress (J), Congress (N), Samyukt Socialist and Bhartiya Kranti Dal. The seat went to the Congress (J).

The total number of electors in the parliamentary constituencies comprising the district was 10,90,900 in 1952, 8,17,556 in 1967, 4,25,001 in 1962, 5,06,832 in 1967 and 5,41,422 in the mid-term poll of 1971. The total number of valid votes polled were 9,02,944 in 1952, 9,29,055 in 1957, 2,33,953 in 1962, 3,08,279 in 1967 and 2,45,731 in the mid-term poll of 1971.

The statement below gives the figures of valid votes obtained by the candidates of political parties and the independent candidates in the last three general elections held in 1962, 1967 and in 1971 :

Party/Independent	No. of valid votes polled		
	1962	1967	1971
Congress	1,04,709	1,20,891	—
Jan Sangh	48,359	53,949	—
Samyukt Socialist	28,279	83,239	2,354
Swatantra	11,162	16,115	—
Communist	—	19,062	—
Congress (R)	—	—	1,85,199
Congress (O)	—	—	37,809
Bhartiya Kranti Dal	—	—	20,369
Independents	41,444	15,023	—

Political Parties

The political parties active in the district are mainly local units of all India or State level political organisations. They propagate and execute their programmes and policies, at the time of elections they usually become more active and organise campaigns to influence public opinion. Some persons, not belonging to any political party, also contest the elections as independent candidates.

Till the achievement of Independence the two main political parties in the district were the Indian National Congress and the Muslim League. Among the other parties that have come up since Independence are the Akhil Bhartiya Jan Sangh, the Kisan Mazdoor Praja Party, the Ram Rajya Parishad, the Revolutionary Socialist Party, the Scheduled Castes Federation, the Praja Socialist Party, the Socialist Party, the Swatantra Party, the Republican, the Bhartiya Kranti Dal, etc.

NEWSPAPERS AND PERIODICALS

Local Publications

There has been a number of newspapers and periodicals published in the district in different languages. A list follows, giving the year of commencement against each organ and the figures of circulation (against some) for 1970 :

Name of organ	Periodicity	Year of commencement	Copies in circulation in 1970
1	2	3	4
Hindi			
<i>Vikas</i>	Weekly	1934	—
<i>Hindu</i>	Do	1934	3,000
<i>Beopar Samachar</i>	Do	1950	—
<i>Shakti Sandesh</i>	Do	1951	1,000
<i>Jagran</i>	Do	1954	1,800
<i>Darpan</i>	Do	1958	—
<i>Yatra</i>	Do	1958	975
<i>Kirti</i>	Do	1959	3,677
<i>Swarnim Prakash</i>	Do	1961	1,750
<i>Lokarsh</i>	Do	1962	4,000
<i>Mujhe Jine Do</i>	Do	1963	—
<i>Badalta Samaj</i>	Do	1963	—
<i>Vir Sawarkar</i>	Do	1966	—
<i>Apna Neta</i>	Do	1966	1,500
<i>Hardwar Darshan</i>	Do	1966	—
<i>Prabhu Ashrit</i>	Do	1966	—
<i>Bharat Khand</i>	Do	1967	1,000
<i>Priya Neta</i>	Do	1968	1,500
<i>Apne Log</i>	Do	1969	562
<i>Naya Jeevan</i>	Monthly	1940	2,000
<i>Jagmag Tare</i>	Do	1964	—
<i>Banaushadhi Darpan</i>	Do	1964	—
<i>Vivek Rashmi</i>	Do	1967	360
<i>Jeewan Sar</i>	Do	1968	1,000
<i>Shakabhari</i>	Do	1968	1,886
<i>Virodhi</i>	Do	1969	—

(Continued)

1	2	3	4
English			
<i>Panchpuri Samachar</i>	Weekly	1964	7,300
<i>Tryst</i>	Do	1964	—
<i>Sex Consultant</i>	Monthly	1969	2,978
<i>Computer Centre Bulletin</i>	Quarterly	1966	150
Urdu			
<i>Bebak</i>	Weekly	1938	1,934
<i>Khabardar</i>	Do	1950	1,100
<i>Azed</i>	Do	1954	1,300
<i>Saharanpur Times</i>	Do	1959	1,125
<i>Muhafiz</i>	Do	1960	—
<i>Badaita Samaj</i>	Do	1962	1,000
<i>Farast</i>	Do	1962	500
<i>Saharanpur Gazette</i>	Do	1964	350
<i>Khaksar-e-Hind</i>	Do	1965	—
<i>Samaj Ki Awaz</i>	Do	1965	750
<i>Asmat</i>	Do	1966	—
<i>Islah-e-Watan</i>	Do	1969	663
<i>Tajalli</i>	Monthly	1949	8,135
<i>Darul Uloom</i>	Monthly	1951	983
<i>Faslon Ki Man</i>	Do	1957	1,978
<i>Kashana-i-Sabri</i>	Do	1958	—
<i>Tashira</i>	Do	1959	—
<i>Islami Duniya</i>	Do	1959	—
<i>Adabi Muqabla</i>	Do	1963	—
<i>Adabi Rai</i>	Do	1963	75
<i>Lagan</i>	Do	1963	280
<i>Hamari Jaddojo Had</i>	Do	1964	1,100
Arabic			
<i>Dawat-ul-Haque</i>	Quarterly	1968	334

[Continued]

1	2	3	4
Bilingual			
<i>Inqalab</i> (Hindi, Urdu)	Weekly	1953	2,000
<i>Yatra</i> „	Do	1958	—
<i>Bedar Hind</i> „	Do	1958	1,115
<i>People's Voyage</i> (Hindi, English)	Do	1962	—
<i>Badalte Rang</i> (Urdu, Hindi)	Do	1964	—
<i>Sadachar Times</i> (Hindi, English)	Do	1965	—
<i>Gurukul Patrika</i> (Hindi, Sanskrit)	Monthly	1949	570
<i>Darvesh</i> (Hindi, Urdu)	Do	1958	500
<i>Gandhi Sandesh</i> (Hindi, Punjabi)	Do	1962	—
<i>Indian Temperance News And</i>			
<i>Clipsheet</i> (English, Hindi)	Quarterly	1961	—
Multilingual			
<i>Sarva Anand</i>	Fortnightly	1965	750

Other Newspapers and Periodicals

The English daily newspapers which are mostly read by the people in the district are the *Hindustan Times*, the *Times of India*, the *Statesman*, the *Economic Times*, the *Indian Express*, the *Pioneer* and the *National Herald*. Among the notable English weeklies those usually read are the *Blitz*, the *Illustrated Weekly of India*, the *Shanker's Weekly*, the *Sports and Pastime*, and the *Time*. The English fortnightlies popular in the district are the *Caravan*, the *Filmfare* and the *Star and Style*. Among the monthlies the *Imprint*, the *Lifes' Mirror*, the *Reader's Digest*, the *Picturepost*, the *Career and Courses*, the *Indian Reviews*, the *World's Sports* and the *Science Today*, all published outside the district, also have a sizeable clientele.

The Hindi dailies published outside the district and generally read by the people are the *Hindustan*, the *Nav Bharat Times*, the *Navjeevan* and the *Swatantra Bharat*. The weeklies, fortnightlies and monthly periodicals and magazines usually read in the district, are the *Dharmyug*, *Saptahik Hindustan*, *Sarita*, *Navneet*, *Niharika*, *Mukta*, *Sarika*, *Kadambini*, *Nat Kahaniyan*, *Saraswati*, *Nandan*, *Chandamama*, *Parag*, *Raja Bhaiyya*, *Natraj*, *Madhuri* and *Urvashi*.

The Urdu dailies, weeklies and monthlies mostly popular in the district are the *Tej*, *Qaumi Awaz*, *Sharna*, *Biswin Sadi* and the Urdu *Sarita*.

A number of free as well as priced publications of the Central and State Governments, numerous diplomatic missions in the country, various cultural, religious, spiritual, political and economic organisations, both national and international and the various agencies of the United Nations Organisation, also find their way into the district and are read by the people.

VOLUNTARY SOCIAL SERVICE ORGANISATIONS

In the past the joint family system not only made for social cohesion, but also provided a measure of social service and security. The establishment of British rule in the country, however, generated forces, economic, social, cultural, educational and psychological, which tended to shift the emphasis from joint family to the individual as unit of social organisation and slowly and systematically weakened the age-old social ties. The opening of institutions like schools and hospitals ushered in western ideas of organised social service in the whole country. Institutions organised for the welfare and uplift of the socially and economically weaker sections of the society mostly depend for their finances on individual charity and philanthropy. Since the achievement of Independence in 1947, the government, both at the Central and State levels, began to take more active interest in the activities connected with social welfare and uplift programmes. The Harijan and social welfare officer in the district looks after this work. His main function is to help voluntary social service and cultural organisations to run efficiently and he also co-ordinates the work of private institutions with that of governmental agencies established specifically for this purpose in the district.

Some of the main voluntary social service organisations engaged in the work of social welfare in the district are described below.

Institutions for Community Welfare

Sri Ganga Sabha, Hardwar, was established by Madan Mohan Malviya with the object of providing comfort and facilities for pilgrims and maintaining the purity and dignity of this holy place. Its main functions include the maintenance of hygienic condition around the Har-ki-Pauri, restoring lost children, disposal of unclaimed dead bodies and immersion of ashes in the Ganga sent by the people from far and wide and guidance to pilgrims visiting holy places of Uttarakhand. It also runs a library and a dispensary which provides free medical aid to the pilgrims and the poor. The volunteers, of this organisation, do useful work in the *mela* (fair) area by extending every kind of help to needy. They are posted on ghats for life saving, traffic control and maintaining law and order. On these occasions they also supply rations to the pilgrims.

It arranges for the performance of *arti*, recitation of *katha* and mid-day offerings at the temples situated at Har-ki-Pauri to keep the spiritual atmosphere of the place. The *arti* attracts a large audience daily.

The Sewa Samiti, Hardwar, was established by Dr Pitamber Das Pant in 1919 with the object of serving mankind. The main functions of the Samiti are similar to those of the Ganga Sabha. The volunteers of this organisation assist in controlling traffic, life saving and maintaining law and order during fairs and rescue from drowning.

It has also established a bank where the people can open current accounts and deposit their ornaments and money. It runs a Mahila Shilp Vidyalaya in which training is given in cutting, sewing and embroidery. It also organises a fruit preservation class for ladies.

The Bharat Sewa Sangh, Hardwar, was established in 1919 by Swami Yoganandji for rendering social service by way of running a charitable dispensary and thus helping the sick and the needy.

Shri Sanatan Dharm Punjab Mahavir Dal, Hardwar, another social service organisation came into existence in 1931, mainly through the instrumentality of Madan Mohan Malviya. It sought to attract an increasing participation of youths in social and religious activities. In 1973-74 it provided books worth Rs 2,408 to deserving students. Besides looking after the improvement of temples and other religious places, the Dal undertakes relief operations at the time of fairs and religious gatherings.

The Suraj Sewa Dal, Manglaur, was founded in 1965 by Nand Kishore Sharma and Mahatma Mahendra Kumar Jain to help the poor and the needy.

The Nagrik Parishad, established in 1969 at Hardwar, aims at cultivating a spirit of self-reliance and mutual co-operation among the people and attracts the attention of the government towards the basic needs of the people here.

The U.P. Zila Madhya Nishedha Samiti, Hardwar, was started in 1973 with a view to accomplish total prohibition. Local prohibition vigilance committees have been established at a number of places in the city. The committees create public opinion against the baneful effects of this social evil, by making contacts with the public, distributing literature, organising cultural programmes, newsreels exhibitions, lectures and social meets. The income is derived from endowments and government grants.

Orphanages

In 1929, an orphanage was started by Jankibai in Hardwar, for giving shelter to orphans. It is engaged in the bringing up of orphans and educating them. In 1972-73, there were 2,200 children under the care of this organisation.

Institutions for Child and Youth Welfare

Bal Kalyan House was established at Hardwar by Narendra Kripal in 1956 to promote healthy growth of children and to give them suitable education.

Nav Yuwak Kalyan Bari, was established by Dr Raju in 1970 at Manglaur to assist the deserving students. It also arranges to provide books and cash to the students of poor class.

Indian Red Cross Society

A branch of the Red Cross Society established at Saharanpur in 1930, has been running a maternity and child welfare centre and a family planning centre. The society provides relief to sufferers from natural calamities. A subscription of Rs 76,148.78 was raised in 1972-73 by the society and an amount of Rs 51,799.19 spent on public welfare activities.

Other Social Welfare Organisations

The Harijan Sangthan, Hardwar established in 1938, as its very name implies, concerns itself mainly with the uplift of the Harijans and eradication of the evils of untouchability. It also runs a primary school and a Harijan dharmshala. It received a grant of Rs 300 from the State Government in 1973-74.

The Bharat Heavy Electrical Limited Club, Hardwar, established in 1964, concerns itself mainly with the welfare of its employees by way of providing free education, books and clothing to the children of low paid employees besides making provisions for women's training in tailoring, family planning activities and other medical reliefs. The club holds children's rallies and conducts cultural and recreational programmes.

CHAPTER XIX

PLACES OF INTEREST

AMBAHTA

Lat. $29^{\circ}51'N.$, Long. $77^{\circ}20'E.$,
Pargana Nakur, Tahsil Nakur,
Population 6,250, Area 678 hectares.

Ambahta which is administered as a town area lies at a distance of 6 km. from Nakur to the south-east and 26 km. south-west from the district headquarters, and is located on high ground. It is at the junction of the metalled roads leading from Nakur to Rampur and Saharanpur to Gangoh. The place was originally a cantonment for troops, established by Firoz Shah Tughluq, and was known as Firozabad. The present place is modern, but contains three old mosques, one built about 1516, another in the days of Humayun and the third was erected in 1755 A. D. The tomb of Shah Abdul Maali, who died in the 17th century, is a fine domed building with minarets. In Akbar's days it gave name to a pargana, now included in Nakur tahsil, which was held in revenue-free tenure by the Pirzadas, a family of Saiyids. A market is held on every Monday. It also has a post-office and an intermediate college.

BEHAT

Lat. $30^{\circ}10'N.$, Long. $77^{\circ}37'E.$,
Pargana Faizabad, Tahsil Saharanpur,
Population 7,186, Area 917 hectares.

The village which gives its name to the town is situated almost in the heart of the town, and not only occupies a position of prime importance in agricultural and cultural life, but has supplied rich archaeological material from the earliest times. Means of communication are fair and the village is connected with metalled road to Chakrata on the north leading from Saharanpur at a distance of 25 km.

In 1834, Captain Cautley, while excavating a canal, discovered a buried town 5·2 m below the site and unearthed a number of Indo-Scythic coins and other remains such as buildings of the Buddhist era. The discovery is

further useful in showing the existence of towns boasting a considerable degree of civilization at the early period, in what may be called the wilder parts of the upper doab. The soil on the site contained numerous specimens of pottery; bricks of a large size and an unusual shape appearing as if they had been made to suit the circular form of the wells; pieces of the slag iron, smelting furnaces, arrow-heads, ornaments and beads. The extent of the deposit, too, would seem to denote a town of considerable extent. Under Shah Abdullah who flourished in the days of Bahlol Lodi, the Muslims settled here. In the days of Akbar it was the headquarters of a pargana for a time called Behat Kanjaware included in the sirkar of Saharanpur. Till 1842 it remained the stronghold of the Rohilla chieftains who made it a separate administrative unit.

The place has a police-station, a sub-post-office, an intermediate college, a dispensary, a dharmshala and a saw mill. Power is soon expected. Market is held on every Sunday.

DEOBAND

Lat. $29^{\circ}42'N.$, Long. $77^{\circ}41'E.$,

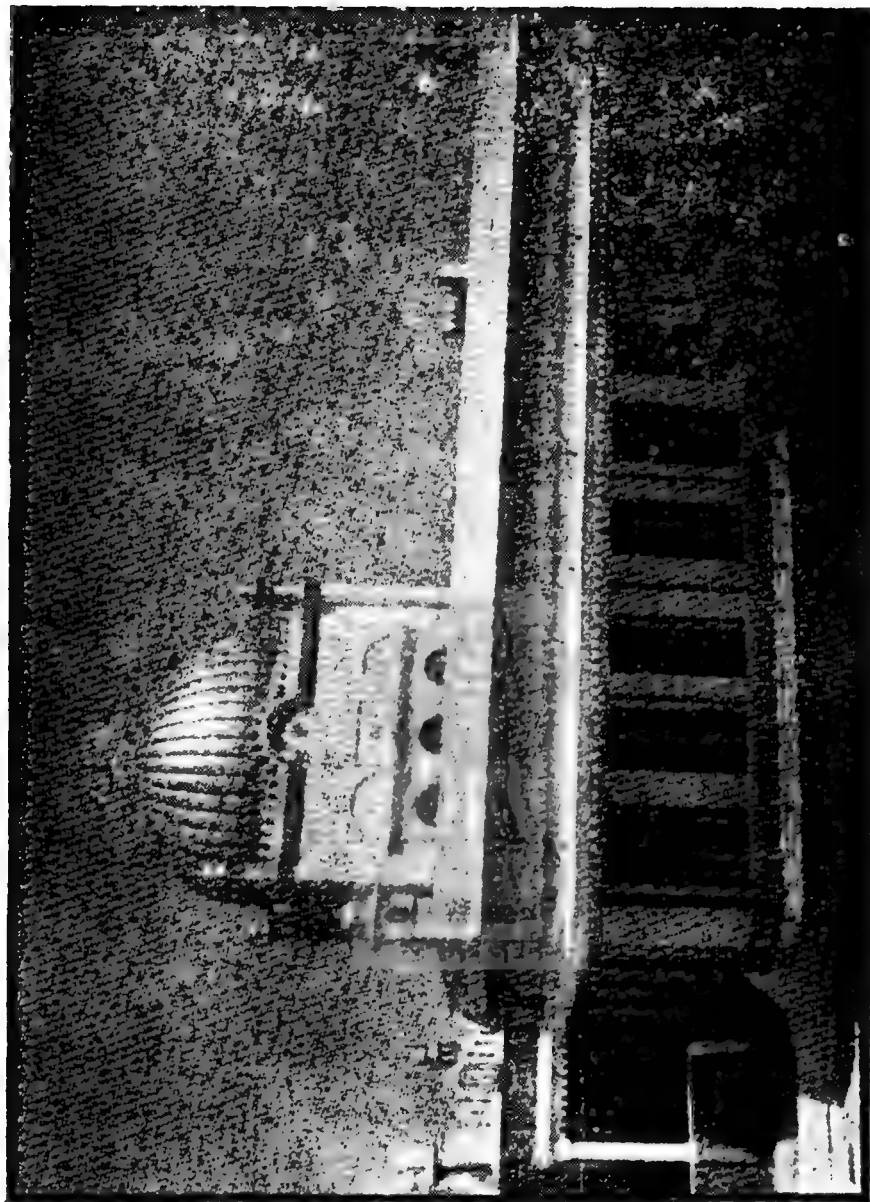
Pargana Deoband, Tahsil Deoband,

Population 38,194, Area 7.90 sq. km.

According to a legend the town owes its name to the presence of a sacred grove (Devi-ban) where there is an ancient temple of Devi, and an annual assembly still takes place in the month of Chaitra in a neighbouring grove. Means of communication are good, and it is well linked by rail and road. The Delhi-Saharanpur line of the northern railway passes via Deoband which is a railway station. Besides, Saharanpur-Muzaffarnagar-Delhi metalled road also passes on which a major portion of trade is carried.

Deoband is a place of great antiquity. In the days of yore the portion in which it is situated was probably one of the tracts occupied by the Aryans. Local tradition relates that the Pandava brothers spent their first exile here. The early Muslim chroniclers seldom mention its history. The records of the *Ain-i-Akbari* show that Deoband was the headquarters both of a pargana and of a *dastur* (district) in the days of Akbar (1556—1605 A.D.). It had a brick fort, and was a very large place. The zamindars were Gujars and Tagas.

During the freedom struggle of 1857 the inhabitants rose against the British. From the beginning of the present century, till 1947, Deoband became one of the important centres of political activity in the district connected with the national movement.



Dar-ul-Hadis Dar-ul-Uloom (House of Religious Meetings of Dar-ul-Uloom) Deoband

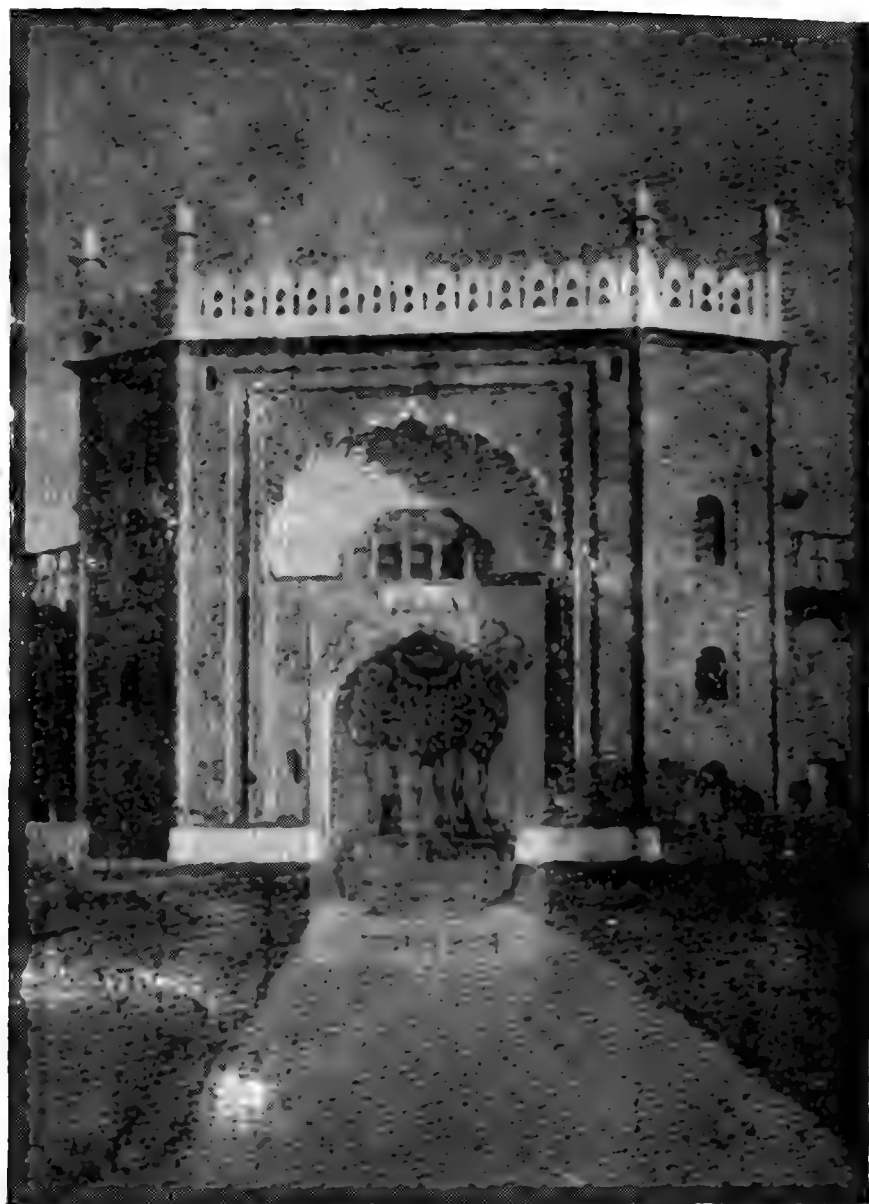
It is a big seat of learning. The Dar-ul-uloom, which has been discussed in chapter XV is located here. The town, which is 34 km. from Saharanpur, is situated about 4 km. west of the Kali Nadi. It has picturesque appearance, but most of the streets are small and few are unmetalled, though great improvements have been effected in this direction. In spite of being old and densely populated it has mostly pucca houses. The old public buildings at Deoband are the tahsil and the police-station which are located within the walls of the fort.

There are, some buildings of historical importance : a Jami Masjid built by Sikandar Lodi in 1507 A. D., and one among many others attributed to Aurangzeb built in 1664 A. D. Close to the south-eastern outskirts is the large tank called Devi-kund, the northern and western banks of which are covered with temples, ghats, the old Sanskrit *pathshala* and numerous other monuments much frequented by pilgrims. Formerly the wells were generally brackish, the street gutters and drains were very defective. But, during the close of the 19th century, the water supply and the natural drainage was improved, which had been altered by the construction of the canals and railway resulting in extensive waterlogging during the rains in the town itself. The town has a municipal board constituted in 1868 for the civic administration. The water pipe line for the supply of drinking water is soon expected. It has two cinema houses to cater to the ever increasing number of cinema goers.

It is a trade centre of great importance, particularly for grains, sugar and oil-seeds. Mention should also be made of annual fair held on Shivaratri at the old shrine of Manika Devi. During the local Bala Sundari fair an exhibition is also held which is frequented by about 50,000 persons. The decay of horse-breeding has affected the horse fair held here, which is now confined to locally bred horses and ponies. Five km. from Deoband railway station lies Rankhandi. Here, Shaheed memorial fair is held every year in the memory of martyrs.

It is the headquarters of a development block of the same name, which was opened in 1953. It also has a post-office, a marketing society, a health centre, an inspection house, and two banks, two dispensaries and two intermediate colleges.

The important indigenous industry of Deoband was that of cotton weaving and blanket making. This trade has, however, undergone a considerable decline in recent years, owing to the competition of factory-made cloth. The chief product is *garha* cloth. It has a government leather tanning factory, the leather being used principally for the manufacture of shoes which are often elaborately embroidered or otherwise ornamented. It has a sugar mill opened in 1935. The industrial element is advancing. A rural industries project was set up here to provide training to local



**Maghribi Darwaja Dar-i-Jadid Dar-ul-Uloom (Western Gate of
Modern House of Dar-ul-Uloom) Deoband**

artisans in wood working, leather work, use of new machines and a pottery development centre. The industrial estate of Deoband has 28 sheds, and provides an incentive to the industrialists giving the town a much more industrial character than it formerly possessed.

FAIZABAD (Badshahibagh)

Lat. 30°19'N.,	Long. 77°35'E.,
Parg. Faizabad,	Tahsil Saharanpur,
Population 2,181,	Area 1,099 hectares.

Faizabad, giving its name to a pargana, stands on the left bank of the Budhi Yamuna, at a distance of 5 km. west of Badshahibagh on the Chakrata road and 45 km. from the district headquarters. The place is also known as Faizabad Bahat. In the time of Akbar it was probably known as Raipur Tatar after the village of Raipur. At a short distance of Faizabad stands the Badshahibagh, on the east bank of the Badshahibagh torrent, the course of which is followed by the road. The name appears to be derived from a grove or garden laid here by Shahjahan, who built a hunting lodge, called Badshahi Mahal, some five km. to the west of Faizabad. Little of the old structure remains, though originally it must have been fairly large and handsome. In the hills above Badshahibagh are the ruins of an old fort known locally by the name of Sarwin Marwar, but no tradition has been preserved of its history. The place possesses a post-office.

GANGOH

Lat. 29°47'N.,	Long. 77°16'E.,
Pargana Gangoh,	Tahsil Nakur,
Population 24,300,	Area 1,802 hectares.

Gangoh lies on the metalled road from Saharanpur to Karnal, at a distance of 16 km. south of Nakur and 44 km. from the district headquarters. It consists of an old eastern and new western portions the former being founded by an unknown legendary hero Raja Gang, from whom its name is derived. Its western suburb, popularly known as the Sarai, was of subsequent origin, established by Shah Abdul Quddus in 1527. Some antiquity of the place is reflected in a large mound, once a fort, and also by three large mausoleums surrounded by smaller tombs, one in honour of the celebrated local fakir Shah Abdul Quddus built by Humayun, while others include those of his sons, Sheikh Ahmad and Sheikh Rukun-ud-din. The

followers of Shah Abdul Quddus still celebrate his death anniversary annually by assembling there. The place consists of three old mosques, the Jami Masjid erected in 1556 A. D. during the reign of Akbar, the Reri Masjid built by Jahangir in 1625 A. D., the Lal Masjid which derives its origin to fakir Nur Muhammad (a local saint) in 1660 A. D.

The town is administered as a municipality. It is liable to be flooded in abnormally wet years from a large swamp. It has a police-station, a post-office, inspection house, dispensary, health centre, veterinary hospital, district co-operative bank, marketing society, two intermediate colleges and two carpet manufacturing units. On every Saturday a market is held, the chief arrivals being wheat, paddy, maize, oil-seeds, *gur* and *khandsari*, leather, cotton and handloom cloth. Local fairs are held in honour of both Shah Abdul Quddus and Baba Haridas here and there is considerable trade in agricultural implements, wooden products and general merchandise, etc. It is the headquarters of a development block of the same name.

HARDWAR

Lat. 29°58'N, Long. 78°10'E.,

Pargana Jwalapur, Tahsil Roorkee,

Population 79,277, Area 15.07 sq. km.

The urban agglomeration of Hardwar comprising the municipal town of Hardwar and the neighbouring localities of Jwalapur Mahavidyalaya, Gurukul Kangri lies on the right bank of the Ganga, at the southern base of the Siwalik range, through which, by a natural breach, the river enters the plains, the width of which at its narrowest point is more than one km. On the left is the Chandi hill, on the top of which stands an ancient temple dedicated to the worship of goddess Durga.

Hardwar is well connected by rail and road from all important places of the country. Direct trains stop at the railway station from Howrah, Bombay, Delhi, Varanasi, Amritsar and Dehra Dun. Regular bus services are available between Hardwar and Delhi, Hardwar and Chandigarh, Hardwar and Dehra Dun, Hardwar and Agra and Hardwar and other important cities of Uttar Pradesh. It is the starting place of pilgrimage for the holy shrines of Badrinath, Kedarnath, Gangotri and Yamunotri in the Himalayas.

The meaning of the present name of the town is disputed. The Shivaites claim that the proper name Haradwara means Siva's gate. This is supported by the legend that the Alaknanda (branch of the Ganga) was borne by Siva upon his head. The Vaishnavites, on the other hand, point triumphantly to the Hari-ka-Charan or Har-ki-Pairi (Vishnu's footprint), as the indisput-

able evidence of the truth of their belief that the Ganga has its rise in the nail of the great toe of Vishnu's left foot.

The antiquity of the town, one of the most celebrated places of Hindu pilgrimage from times immemorial, is undoubted not only from the extensive large bricks which are everywhere visible and the numerous fragments of ancient sculpture of the Ganga-dwara temple, but from the great variety of the unearthed coins. Hardwar is mentioned in the *Mahabharata* as one of the places visited by Arjuna during his exile "many Brahmans went with Arjuna, and he made pilgrimages to all the holy places, and he went to Hardwar on the river Ganga, and bathed there; and a maiden named Ulupi, the daughter of Vasuki, the Raja of Nagas, was likewise bathing there, and she saw Arjuna and besought him to espouse her, and he abode with her many days." It is said that the Pandava brothers along with their wife Draupadi retired to the snowy range of the Himalayas passing through this town.

According to the same text, Kapilasthana is still pointed out at Hardwar, so named after the sage Kapila who is said to have practised religious austerities here and foretold the descent of Ganga from the heavens through the efforts of Ikshvaku king Bhagiratha of Ayodhya to redeem the sins of his ancestors.

Another common name of the town is Gangadwara, by which name it was known to Hiuen Tsang (629—645 A. D.).

The name Gangadwara is regularly used by early Muslim chroniclers, Abu Rihan and Rashid-ud-din. About 1398 A. D., the town was plundered and devastated by Timur (the central Asian invader).

Abul Fazl, in the reign of Akbar (1556—1605 A. D.) refers to Hardwar where there was a mint for copper coins. Local tradition has it that Akbar used to be supplied with drinking water from Hardwar. In his time there was a brick fort on the bank of the Ganga. The land enjoyed peace, and was seldom visited by famine and this condition of affairs was maintained. In 1621, Jahangir himself visited Hardwar. In his reign (1605—1627 A. D.) the place was visited by Tom Coryat (a foreign traveller) who described it as the capital of Siva, the Ganga flowed among large rocks with a pretty current. Under the Mughal rule the town enjoyed peace. During the anarchy that followed Aurangzeb's death in 1707 A. D., it also suffered like the rest of the doab from the constant inroads of the Sikhs. In 1796 the town was visited by Hardwick, who called it a small place situated at the base of the hills. In 1803, after the British conquest of the upper doab, it was included in the Saharanpur district. Raper visited in 1808, described it as a very small town, having only one street, about 4.6 m. in breadth and a furlong and a half in length. On the British occupation, till 1857 there were no events of importance. However, in 1857, at the outbreak of the freedom

struggle, the inhabitants rose against the British. From the beginning of the present century Hardwar also became one of the important centres of political activities connected with the national movement.

Ablution in the holy Ganga is the great religious rite practised here by the pilgrims, their belief being that purgation from sin is thus obtained. According to the Hindu mythology king Bhagirath of Ikshvaku dynasty of Ayodhya and a celebrated ancestor of Rama is reputed to have brought Ganga down to earth.

The great object of attraction is the bathing ghat called Hari-ka-Charan or Hari-ki-Pairi (Vishnu's footprint). It was originally very small, having a width of only 10·38 m. at the top and 39 steps. This ghat is now much enlarged. The depth close to it is not above 1·22 m. The Birla tower and Man Singh-ki-Chhatri (built in the reign of Akbar) are the main attractions for the tourist here.

Close by is a small temple, called Brahma-kund situated in mid stream, which is most probably the same that was noticed by Hiuen Tsang in 634 A.D., but the great temple of his days has long ago disappeared. A bath in the *kund* is of great religious value as this is the spot where the creator (Brahma) arranged the descent of the mother Ganga to the earth. To the Hindus Ganga sanctifies both life and death. In her lap has been nourished India's more than 3,000 year-old civilisation and is the most holy and most venerated river on earth. After sun set the '*ari*' is performed. The gradual ascent of darkness heralds the lighted '*diyas*' floating swiftly down the river in boat shaped leaves. Hundreds of tiny ambassadors of light bob up and down with the waves as if carrying a message from the devotees who set them to sail. A hush falls as the light from the sky merges with the gathering darkness. The priests from the temples on the ghats line up facing the river with lighted lamp stands in hand. The silence is broken by the innumerable voices singing the '*arti*' song of Ganga, "Om Jai Ganga Mata...".

The bathing commences in the month of Chaitra, when the sun enters the Zodial sign of *mtna* (Pisces) and concludes on the day when the luminary enters *mesha* (Aries), agreeably to the solar computation of the Hindus, corresponding with the 13th April. Every twelfth year the planet Jupiter is in the sign of Aquarius (*kumbh*) at this time, and the occasion is considered one of special sanctity, the fair being called the *kumbh mela*. In 1796, the attendance was estimated at two and a half million and in 1808 at two million. In 1820, 430 persons including some sepoys on guard lost their lives in the *mela*, and the ghat was enlarged. In 1892, the fair was broken up on account of an outbreak of cholera, and the vast concourse of people sent off by rail before the great bathing day; and this resulted in the formation of the Hardwar Improvement Society, supported by contributions from Hindus all over India, which has introduced some very useful sanitary

measures. The bottom of the pool was paved, while an iron railing was erected to save bathers carried out into the deep stream. In 1950, on the great bathing day (April 13) elaborate arrangements were made but 22 persons lost their lives. In 1962 the fair was successfully held and is estimated to have attracted two million bathers on April 13, the principal bathing day. On the great bathing day (following on 13th April, 1974) elaborate arrangements were made to meet the rush of 4 million persons. The courtesy staff helped the pilgrims in various ways in 14 sectors into which the fair was divided. It was conducted under the direct superintendence and control of the district magistrate assisted by an officer incharge and a committee to enforce the rules framed for its management under the U. P. Melas Act, 1938 (U. P. Act No. XVI of 1938).

Six years before and after each *kumbh mela* comes the *ardh-kumbh*, when again the attendance rises to considerable proportion. There are other bathing festivals, but the chief fair of Dikhauti is that which takes place on the first day of the Hindu solar year, the traditional birthday of the Ganga. Other ordinary fairs take place on the Makar Sankranti in January, when the sun enters Capricorn; the new moons of Magh, Jeth and Kuar. Special fairs are held on the occasions of lunar and solar eclipses, when bathing in the sacred stream is an act of peculiar merit. On the 15th day of the bright half of Kartika a large number of persons bathe in Ganga. During Dasahra the attendance is very large.

Close to the Har-ki-pairi is the Gangadwar temple, the most important of all the Hardwar shrines. It is visited by all the pilgrims. South of it comes a succession of temples. South of Lalta Rau is Mayapur which was considered by General Alexander Cunningham to be a very ancient site, identical with that of the populous city, described by Hiuen Tsang. The antiquity of this place is undoubted, not only from the extensive foundation of large bricks, and the numerous fragments of ancient sculpture, but from the great variety of the old coins, which were found here. The place has the ruins of the old fort, 69·7 sq. m. attributed to Raja Ben, and several lofty mounds covered with broken bricks. There are three old temples dedicated to Narayana-sila, Maya Devi and Bhairava. The temple of Narayana-sila, or Narayana-bali, is made of bricks, 58·1 sq. cm. and 0·06 m. thick, and is plastered on the outside. Collected around it are numerous squared stones and broken sculptures. Among the broken sculptures, Cunningham was able to identify only one small figure of Buddha, the ascetic, surrounded by small figures of ascetic attendants.

The temple of Maya Devi is built entirely of stone; and judging from the remains of an old inscription over the entrance door-way, it may be as old as the 10th or 11th century. The principal statue, which is called Maya Devi, is a three-headed and four-armed female in the act of killing a prostrate figure. In one of the hands, Cunningham recognised the *chakra*, or

discus; in another there is an object like a human head; and in the third hand the *trishul* (trident). This is certainly not the figure of Maya Devi, the mother of Buddha. It corresponds best with the figures of Durga; but if the name assigned to it is correct, the figure must be that of the Pauranik Maya Devi, who, according to the *Bhagavata*, was the 'energy of the supreme, and by her, whose name is Maya, the Lord made the universe.' But the action of the figure is most decidedly opposed to the identification; and Cunningham was therefore inclined to assign the statue to Durga, the consort of Siva, to whom Vishnu gave his discus, and Siva his trident. This attribution is the more probable as there is, close beside it, a squatted male figure with eight arms, which can only be Siva, and on the outside of the temple there is a *lingam*, and the statue of the bull Nandi. There is also a fragment of a large female statue, which may possibly have been Maya Devi, but it was too imperfect for recognition. As there was nothing about the temple to give any clue to its identification, Cunningham only conjectures that the original figure of Maya Devi must have been destroyed by the Muslims, and that the vacant temple was afterwards occupied by the votaries of Siva. Outside the recent temple of Sarovanoth, Cunningham found a statue of Buddha seated in abstraction under the Bodhi tree, accompanied by two standing and two flying figures.

At Mayapur, just below Ganesh-ghat, are the headworks of the Ganga canal. It was from here that the canal was drawn off to irrigate the doab from the Siwalik hills, transforming it from a famine-ridden region to a green relatively prosperous area. Major P.T. Cautley, who was the leading spirit of the whole scheme proceeded to Hardwar in December, 1839. He commenced a close examination of the *khadar* or lowlands as before him a series of levels were taken which showed the plan was not feasible, owing to the sudden rise of uplands on the west side of the Solani river. It was found by the Victorian engineers that the channel at Ganesh-ghat carried away more than one-third of the total volume of the Ganga and thus gave a supply amply sufficient for the whole canal. Difficulties were encountered in the character of sub-stratum, which was found to be sandy and to underline the clayey surface soil at depths. The Ganga canal commenced to distribute water for irrigation in 1855.

The Bhimgoda tank lies on way to Sapt Rishi. The tradition is that Bhima (the Pandava), was placed here to guide the Ganga in its descent and that a kick from his horse formed the hollow in the rock now known as Bhimghora or Bhimgoda tank. The Sapt Rishi Ashram and the Sapt Sarowar lies about four km. north of Har-ki-Pairi. Here the Ganga had to split in seven currents to avoid the displeasure of seven rishis worshipping at different spots. Nearby is the Parmarth Ashram. It has beautiful images of goddess Durga and other deities. The temple built in honour of

Manasa Devi lies on the top of the hill. From the site of this temple one can have a nice birds-eye view of Hardwar.

The regional tourist office situated near the railway station, provides information and guidance about places worth visiting in and around Hardwar. To provide accommodation to the visitors in Hardwar, the government has constructed several inspection houses, rest houses, dak-bungalows, etc., details of which are as under :

Name	Amenities	Location
Tourist Bungalow	Ten well-furnished double bedded rooms	Hardwar
Canal Dam Inspection House	Two suites with attached bath rooms	Mayapur
Canal Inspection House No. 2	One suite with attached bath room	Mayapur
Canal Inspection House No. 3	Two suites with attached bath rooms	Mayapur
Canal Inspection House No. 4	Two suites with attached bath rooms	Mayapur
Laljiwala Inspection House	Two suites with attached bath rooms	Laljiwala
Zila Parishad Inspection House	Four suites with attached bath rooms	Near roadways bus-station
P. W. D. Inspection House	Three suites	Bhimgoda road
Forest Rest House		Ranipur
Railway Retiring Rooms	Five rooms	Railway station Hardwar

Besides, there are a number of dharmshalas names of which include Kali Kamli, Dhandevi, Basanti Devi, Nanki Bai, Karnatak, Madrasi, etc. Private guest houses are Gita Bhawan, Narshing Bhawan, Bholagiri Ashram, Bhatia Bhawan, Modi Bhawan, Gujrat Bhawan, Kasturi Bhawan, Ambala House, Ganga Ashram, Batala House, etc. There are also several hotels which provide boarding and lodging facilities on moderate rates. It is a good place for excursions also. Travellers, poets and artists of every age and clime have lavished endless praise on Hardwar for its natural loveliness and serenity. The Ganga escapes from the bondage of the Siwalik range from its source and enters the plains at Hardwar. The spell of Ganga here is indeed very powerful and none can leave it without a sense of regret, so much so that many come back driven by some inner nostalgia to this holy town where colourful customs and traditions strive to keep pace with the fast tempo of present day life. The greatness of it lies perhaps in its smallness. The bathing ghats, gardens, parks, cinema houses, shopping

centres, branches of several banks, hospitals, post-office, book stalls, temples, shrines, forts, ancient ruins dating back to the Buddhist era and the cool breeze; fragrant with the aroma of flowers and fruits—these and many more contribute to the charm of Hardwar, fabled in myth and history. The Himalayan wind that sings through it, whispers softly in the ears of travellers and pilgrims. Here sadhus and rishis with their austere countenance and colourful garbs mingle with people in the ordinary walks of life. Here truly can the tourist view a scene reflecting the ancient traditions and culture of India. What makes the place unattractive is Panda (Brahmana), the intermediary between man and his maker, a thriving and most materialistic trader in the spiritual life. Another famous institution here is the family priest who has a card-index system. The cold weather arrives here earlier than in other parts of the country owing to its proximity to the Siwaliks. The place has a police Kotwali, a telephone exchange, several educational institutions, charitable dispensaries, libraries, and transport agencies. It is the headquarters of a resident magistrate.

The old bazar which is a narrow are running parallel to Ganga is the main shopping centre. A beautiful park has been laid opposite the Kotwali in the memory of an ex-president of the City Board, Pauna Lal Bhalla.

Several pharmaceutical works and drug manufacturing concerns are located here. They generally prepare Ayurvedic medicines from herbs collected from the Himalayan region. Notable among them are the Gurukul Kangri and Rishikul pharmacies functioning under the Ayurvedic colleges bearing these names.

Jwalapur

Jwalapur which gives its name to the pargana lies in the lowlands of Ganga *khadar* on the north bank of a branch of the Ganga canal. It is linked by rail and road, and has a railway station of the same name. Jwalapur is also traversed by the direct road from Hardwar to Roorkee. The place contains probably an unexcavated mound which marks the site of an old Rajput fort. Near the mound there are several fine masonry tanks, such as Naya, Pandewala and Rup Chandrawala, and the large Tikri tank by the side of the road that leads to Hardwar. The first school started on western lines belonged to the American mission. Besides the Gurkul Mahavidyalaya there are some aided Sanskrit *pathshalas* and an intermediate college. The place possesses a police-station, a post-office, a dispensary and a dak-bungalow. Market is held on every Monday where articles such as *ban*, rope, wood-works, shoes etc., are brought for sale. The place also possesses a marketing society,

Kankhal

The town of Kankhal lies about one and a half km. south from the ancient village of Mayapur. It has a picturesque appearance with fine trees

and temples. It is said to be one of the five places of pilgrimage around Hardwar. According to popular belief by taking bath at Gangawara, Kushawant, Bilsa Tirth, Nil Parwat and Kankhal a person becomes purified and attains heaven. The temple of Daksheswara stands in the southern extremity of the town. It is said to mark the spot known as Kanakhola in the Puranas where Siva spoiled the sacrifice of Raja Daksha, and where Sati or Uma, the daughter of Daksha and spouse of Siva, immolated herself in the fire. The temple was originally domed, but the dome was broken by a decayed banyan tree, which has now disappeared. The temple is enclosed by a quadrangle surrounded by cells, and a small square building with a bell presented by the Maharaja of Nepal in 1848. Formerly the Ganga flowed close under its walls but a series of floods changed the course of the stream.

Besides, the town of Kankhal has many other temples, but none is old or worthy of special mention, excepting perhaps the Chattri erected during the close of the nineteenth century by the local chieftain of the erstwhile Landhaura estate. It is built on a massive stone platform with deep foundations, so that the structure should be able to withstand the action of the river. The view from the summit is extremely beautiful, taking in the sacred hill of Chandi and its temples on the opposite bank of the stream, as well the river and Hardwar, beyond which rise the outer hills crowned by the snowy peaks of the Himalayas.

MANGLAUR

Lat. $29^{\circ}48'N.$, Long. $77^{\circ}53'E.$,

Pargana Manglaur, Tahsil Roorkee,

Population. 19,723, Area 681 hectares

The town, administered as a municipality since 1950, lies on the metalled road from Muzaffarnagar to Roorkee at a distance of 10 km. south from the latter and 42 km. south-east from the district headquarters. It was founded by a legendary hero, Raja Mangal Sen, a Rajput chieftain of Vikramaditya, and remains of fortress attributed to him can still be traced. Its occupation by the Muslims is proved by the existence of a mosque called Shah Wilayat built by Balban in 1285 A.D., as supported by its Arabic inscription. The place was the capital of a pargana in the days of Akbar. Manglaur has a police-station, a hospital, a health centre, a marketing society, an intermediate college. It is a big *gur-mandi* of the district. Market is held on every Wednesday in which the chief commodities traded are paddy, wheat, *khand-sari*, handloom cloth, leather and shoes. The important indigenous industry of Manglaur was that of the cotton weaving. This trade has however, undergone considerable decline in recent years, owing to the competition of factory-made

cloth. The rural industries project is trying to infuse life into the town by introducing and helping out setting up of some small scale industries.

MUZAFFARABAD

Lat 30°7' N.,	Long. 77°43' E.,
Pargana Muzaffarabad,	Tahsil Saharanpur,
Population 3,276,	Area 760 hectares

The village which gives its name to the pargana lies at a distance of 27 km. north-east of Saharanpur. It is approached from Khujnawar, from where two roads lead to Fatehpur and Sherpur, on the metalled road from Saharanpur to Dehra Dun. In spite of its antiquity it has no archaeological remains. It was the capital of a pargana at least as early as the days of Akbar. The place stands on the southern edge of the submontane tract, between the Nagdeo on the west and the Chaicha Rau on the east. It possesses a development block, a post-office, a health centre, a family planning centre and one intermediate college. Market is held on every Monday. The place is electrified.

NAGAL

Lat. 29°50' N.,	Long. 77°38' E.,
Pargana Nagal,	Tahsil Deoband,
Population 822,	Area 121 hectares.

Nagal which gives its name to the pargana is situated on main route from Muzaffarnagar to Saharanpur and lies on the side of the metalled road at a distance of 16 km. from the district headquarters. From it a branch road leads northwards to Gagalheri and a second runs to Nagal railway station, this being 1 km. to south-west. Formerly the place was used as one of the stages on the route from Meerut to Mussoorie. The trade is of some importance, the place having benefited largely by its situation on the main line. *Gur* and *khandsari* are the main items exported from Nagal market. It is the headquarters of a development block of the same name. It also contains a police-station, a development block, a health centre, veterinary hospital and sub-post-office. The place is electrified. The rural industries project has opened a centre at Nagal to provide training to local artisans in wood working, pottery and use of new machines.

NAKUR

Lat. 29°55' N.,	Long. 77°18' E.,
Pargana Nakur,	Tahsil Nakur,
Population 8,370,	Area 0.26 sq. km.

Nakur, is connected by metalled road from Saharanpur to Gangoh at a distance of 24 km. Other roads lead to Sarsawa, Ambahta, Rampur. The place is built on a high bank. Underneath the bank is a large *Jhil* which in abnormally wet years has done considerable damage to the lower portions.

It is a place of great antiquity and was probably included in the kingdom of the Pandavas with their seat at Hastinapur. According to one tradition it was founded by Nakula, one of the Pandava brothers who built a Siva temple here. According to another legend Nakula established a war-post here during the Mahabharata war. Nothing is known of its subsequent history for many centuries. In the latter half of the eighteenth century it became the seat of Rai Singh a Sikh leader. From the British occupation in 1803 till 1857 no major incident occurred here to disturb the quiet flow of civil administration. However, in 1857 the town was burnt by the Gujars and the local inhabitants resisted the British army but without much effect. Afterwards it became one of the seats of political activity against the British in the national movement.

The town which is the headquarters of a development block of the same name has a police-station, a post-office, branch of the State Bank of India, dispensary, health centre, intermediate college, and a cinema house. It also has a dharmshala and a fine Jain temple. The general condition of the inhabitants is prosperous, the houses are mostly pucca. Markets are held on every Sunday and there is considerable trade in tobacco, the place having benefited largely by its situation on the metalled road.

RAMPUR-MANIHARAN

Lat 29°48' N.,	Long. 77°27' E.,
Pargana Rampur,	Tahsil Deoband,
Population 12,997,	Area 1,426 hectares

Administered as a town area, Rampur-Maniharan lies on the west side of the metalled road from Saharanpur to Nanauta and Shamli, at a distance of 27 km. from Deoband and 21 km. from the district headquarters.

The town is said to have been founded by a chieftain called Raja Ram. During the days of Akbar it was the seat of a pargana, but many details are not available. The place has its own local fakir named Sheikh Ibrahim Pir and in his honour, near his *dargah* a religious fair is held annually. There is a fine Jain temple with a gilt spire. Within the town the houses are closely crowded together, along narrow and tortuous lanes. The place is the headquarters of a development block of the same name and possesses one police-station, health centre, post-office, marketing society and intermediate college. There is some trade in grain and the place is noted for the manufacture of glass bangles. The market held on every Monday is purely of local significance.

Ranipur

After independence the need for rapid industrial development of the State was felt as the only means for rebuilding its economic infra structure and in 1962-63 at Panipur about three km. from Hardwar the Bharat Heavy Electricals Limited was established with foreign collaboration. This project has also led to concomitant development of many ancillary units in neighbouring areas. Ranipur was constituted a notified area in 1965 and at the census of 1971 had a population of 12,094 persons. It has a total area of 26.9 sq. km. and the town is electrified. The place has two inspection houses each belonging to Bharat Heavy Electricals and Forests.

ROORKEE

Lat. 29°51' N., Long. 77°53' E.,
 Pargana Roorkee, Tahsil Roorkee,
 Population 62,456, Area 17.04 sq. km.

Roorkee lies on the main line of northern railway and possesses a railway station of the same name. It is connected by metalled roads with Muzaffarnagar, Saharanpur and Hardwar. The place is said to have been founded by a Rajput chief who called it after one of his wives named Ruri. It was one of the old Akbari parganas formerly included in the Deoband *dastur* and was mainly a forest area.

Roorkee was, until the Ganga canal works were started a mere mud built sleepy village on the banks of the Solani river. The place was raised from this obscure position by the establishment in 1843 of the Ganga canal workshop, and the Civil Engineering College, instituted in 1847 by the late Thomason, lieutenant-governor of this province. The Bengal Sappers and Miners had been cantoned here in 1853, and the place had formed a station for the British troops since 1860. The church of St John the Baptist was built here in 1852, and consecrated some four years afterwards.

Roorkee is well wooded. A short distance above it the Ganga canal, flowing between raised embankments, is carried over the wide bed of the Solani river by a magnificent brick aqueduct. The main town is situated on high ground. The metalled road from Meerut and Muzaffarnagar to Mohand and Dehra Dun passes the main market. On the west side of it the land is low and on the north of Roorkee lies the Solani river, always moist and green, and in rains containing a considerable body of water. The town extends into this low tract.

At present Roorkee is a fair-sized municipal town, with good, broad metalled roads meeting at right angles and lined with shops. Water is good and the place is electrified. The civil lines contain in the north the canal

foundry and workshops, while between the canal and the road are numerous bungalows, the club and other institutions, and to the east of the road stands the handsome range of buildings of the old Thomason Engineering College surrounded by workshops and the residences of the staff and students. The other public buildings comprise the subdivisional magistrate's court and offices, the tahsil buildings, the police-station and the old building of the dispensary originally started in connection with the canal work. The town possesses an excellent meteorological observatory. The opening of tahsil school here in 1851, marked the birth of the vernacular education in the district. A degree college was established in 1960, the course in B. Ed. being introduced in 1964. Most of the local population is served by a hospital. Besides, there are large number of private practitioners providing it adequate medical facilities. The headquarters of the Roorkee development block is also located in the town. The place has several gardens, parks, cinema houses, modern shopping centres, branches of several banks, post-offices, book stalls, dak bungalows, dharmshalas, modern well-equipped hotels and some drive-in-motels etc.

At Piran Kaliyar, on the Ganga canal about 8 km. north-east of Roorkee, a large fair is held every year between 1, and 14 of Rabi-ul-Awwal near the tomb of Shah Ala-ud-din who lived, and died here in 1291 A. D.

Roorkee is famous for its drawing, surveying and mathematical instruments and has long attained an advance stage of development. The Structural Engineering Research Centre provides latest available knowledge relating to structural engineering. The Central Building Research Institute was established here in 1947. The Uttar Pradesh government workshop has been working since 1953 and also there is an Irrigation Research Institute under the irrigation department. A large printing press of the State Government is also functioning here. The industrial estate offers incentive to the industrialists giving the place a much more industrial character than it formerly possessed and employment to many. The establishment of the Hardwar Heavy Electricals Limited has led to the development of many ancillary units at Roorkee.

SAHARANPUR (CITY)

Lat. 29°58' N.,

Long. 77°33' E.,

Pargana Saharanpur,

Tahsil Saharanpur,

Population 2,25,396,

Area 25.25 sq. km.

The city which gives its name to the district is situated almost in the heart of the district.

In 1886, the Oudh and Rohilkhand Railway was extended through Roorkee to Saharanpur, its terminus, followed by a branch line linking Laksar with Hardwar. In 1900, the later railway line was extended up to Dehra Dun. Saharanpur is a junction of the northern railway, and is connected with Delhi, Amritsar and Howrah. Saharanpur is connected by metalled road to Chakrata on the north, Mohand and Dehra Dun on the north-east, Deoband and Muzaffarnagar on the south-east, Nakur, Gangoh and Karnal on the south-west, and Sarsawa and Ambala (running parallel to the railway) on the north-west. A major portion of trade is done by these roads.

During the reign of Muhammad *bin* Tughluq (1325-1351 A. D.) the city of Saharanpur was founded in 1340 A. D., named after a Muslim saint Shah Haran Chisti, who flourished, died, and was buried here. His tomb is still visited by a number of pilgrims annually. About 1398 A. D., the city was plundered and devastated by Timur (the Central Asian invader), who passed through it from Delhi. On the eve of the first battle of Panipat in 1526 A. D., Babur went across it to the battle-field. In Akbar's time (1556-1605 A. D.), it was made the headquarters of a sikkar and was of large size. Under the Mughals, Saharanpur was a favourite summer resort of the court and the nobles, who were attracted alike by the coolness of its climate and the facilities which it offered for sport. In the reign of Jahangir (1605-1627 A. D.), the empress Nur Jahan visited parts of Saharanpur.

In 1803, the city became the headquarters of a district, and the residence of collector-magistrate and his subordinates. The city is barren in historical events till 1857, when the war of independence broke out at Meerut. Affairs in the city assumed a serious phase. During the British rule, Saharanpur city was the principal station in the Great Trigonometrical Survey of the Himalayas, where all the most valuable observations whether of latitude or longitude were taken.

The site of the city is low and moist, and lies to the north of the Saharanpur railway station, between the road from Deoband to Ambala, and to the west of the Dhamola river. It is crossed by the Pandhoi *nala* (a small stream), flowing from north and drains the south and eastern portions of the city. It was originally a mere sluggish swamp in a very dirty condition, overgrown with jungle and choked with mud. In 1870, a successful scheme was carried out for the effectual surface drainage of the city under G. H. Howe. The main drain called the Craigie *nala*, reconstructed in 1901, passes along the southern and western outskirts. On the northern borders a similar drain falls into the Pandhoi from the west. Now the surface drainage is carried off in a rapidly flowing stream into the Dhamola, though in rains the flood water is apt to hold up the city drainage. Under the Act XXVI of 1850, the city was made a municipality in 1867

which is now located in town hall and is divided into 14 wards for civic administration. Electrification of the city took place in 1926.

The city's densely populated muhallas of Khalapur, Nawabganj, Jagyan, Charjan, Subzimandi, Hiraganj, Mirganj, Pansarian, Cheontala, Burtelayadgar, Mochian, Faruqi, Kaithan, Halwaian, Patwan, Mufti, Chob-faroshan, Nayabas, Budhiya Darwaza, Raiwala, Chah Chhabile, Shormian, Shah Bahloli, Mandi Sheopuri, Lakhi Darwaza, Gadhi, Sarai Ghariban, Banjaran, Qazi. Dholikhal and Chamaran are traversed by numerous thoroughfares. The public buildings of the city include the tahsil, the collectorate, the judiciary and the kotwali. In spite of being old these localities have mostly pucca houses. In recent years new colonies have also sprung up in the city such as Madhavnagar, Mission compound, Krishnapura, Patelnagar, Lakshminagar, Gandhinagar, Nehrunagar, and Shardanagar.

There are some buildings of architectural or artistic merit. In the close proximity of the Subzimandi is the old Jami Masjid built in 1530 during the reign of Humayun. In 1644, the Nilgaran Masjid was built on the road leading to Chilkana from where a small branch leads to the old temple of Bhuteshwar Mahadeo. In 1779 A. D., Zabita Khan had built a fine mosque, which is one of the old masjids existing in the town. The city is an important centre for the distribution of plants. The Saharanpur botanical garden, which is a bureau of horticultural information, is situated about one and a half km. from the railway station, between the Chakrata road and the jail, near the city. It is admirably laid out, with fine ornamental trees, tanks of water, flower beds and is an attractive picnic spot. The garden known as the Farhat bakhsh was laid out by Intizam-ud-daula prior to 1750, and since then it became the favourite resort of the Rohilla chieftains. It was renovated by Ghulam Qadir (the Rohilla) and it was transformed into botanical garden in 1817. The purpose of public garden of this sort, is educative and to stimulate horticulture, to keep up a supply of best and pure seeds and to provide field for research. Adjoining the botanical garden on the south-west, and close to the Chakrata road, is the old Rohilla fort standing in Nawabganj. It was built, it is said, by Raja Indargir Goshain and was bestowed by M. Perron on a Pathan nobleman connected with the Jhajhar family. The district jail is located within the walls of this fort. For horse breeding a stud depot was established in 1842 and was converted into a remount depot, which has numerous ranges of stables and quarters. The extensive stretch of ground occupied by the remount is bounded on the north by Deha road and on the east by the Nagdeo stream.

To the east of Dhamola and north of the railway station are the old bungalows of the district officials and civilians and St Thomas' Church. This Anglican Church, built in 1854 at a cost of about Rs 17,000 most of which was obtained by private subscription, is served by a chaplain. It is

dedicated to St Thomas and was consecrated on the 31st of December, 1887. The church was afterwards enlarged, while in 1899 many internal improvements were made. Opposite the Subzimandi stands the Jami Masjid, a fine structure said to have been constructed by local Hindus and Muslims between the close of the nineteenth and opening of the present centuries. This mosque is designed on the pattern of the Jama Masjid of Delhi, and its lofty minarets are a conspicuous feature in the landscape for many kilometres around.

The most important indigenous industry of the city is that of cotton weaving which affords employment to weavers. This trade has, however, undergone a considerable decline in recent years, owing to the competition of factory-made cloth. The chief products is *garha*, produced everywhere. Cotton-printing is also carried out at several places without special merit and cannot compare with that of Muzaffarnagar. The most celebrated industry is the wood-work which has long been established in the city and has acquired a wide reputation. In its oldest form this industry chiefly consisted of wooden materials for decoration: wood-carving of doors, doorways and the like, the principal material employed, being *shisham*. Modern requirements have led to a large demand for household furniture, which is now produced in considerable quantities, and is, in many cases, of great excellence. It is made of *shisham* and *tun* wood, while smaller articles are manufactured from the soft white wood known as *dudhi*, which grows in abundance on the Siwalik hills. The ornamentation is confined mainly to geometrical patterns, and ordinarily the only carving consists of light floral designs. A modern innovation is the inlaid work. Floral designs are worked out on plain *shisham*, and this decoration, though occasionally applied to picture frames and caskets, is best adopted to panels, the finest specimen of this work being found in the Saharanpur church. The existence of the Siwalik forests afford employment to a large number of workers in cane and other jungle products and an extensive basket industry thrives. Formerly, Saharanpur was also noted for its glazed ornamental ware and glazed tiles but in both cases the craft has died out from the lack of encouragement. The only other trade deserving mention is of leather which is produced after the country process and is used principally for the manufacture of shoes, which are often elaborately embroidered or otherwise ornamented. Formerly the trade of the district was inconsiderable owing principally to the absence of effective means of communication. After the British occupation it grew rapidly as a trade centre on the routes from Meerut to the Punjab. The opening of the railway has also developed trade. The industrial element is on the increase, a number of cotton ginning and pressing factories, flour mills and other concerns have come into existence, giving the city a much more industrial character than it formerly possessed. In 1910, the Saharanpur distillery was established. Among the large-scale industries sugar, cigarette, paper and textile are the

most important and the Imperial Tobacco opened in 1927 at Saharanpur today provides employment to 1,821 workers daily. The average number of workers daily employed in Star Paper Mill, established here in 1937, is 1,840. The estimated growth of the industries including the city is 10 per cent every year which is more than the national growth rate of 8 per cent.

The local marketing centres of the city are Nehru bazar, Leather Market and Naya bazar where from the basic necessities of life can be had. Markets of this place are merely collecting and distributing centres for the products of the neighbouring areas. Many small fairs are held in honour of Goga Pir or Zahir Diwan, as he is called in the other parts of the Meerut Division and in Bijnor. These assemblages usually take place in the month of Bhadra. Besides, assemblages are held on occasions of Hindu festivals, such as Dasahra, Holi and Diwali. Similarly, the Muslim festivals of Muharram, Chehlum and the like are also celebrated in the city. The place has about 215 temples and shrines, 11 *gurudwaras* and 265 mosques.

For many years after the introduction of British-rule the only schools were *maktabs* and *pathshalas*, which received no official support. The first school started on western lines was that of the American Presbyterian Mission in 1837. For higher education, now gaining importance, the city has two degree colleges. In addition to these, there are two public libraries. The place has 11 cinema houses, 6 clubs, 1 veterinary hospital and the Gandhi park which is used for public meetings inside the city. Most of the local population is served by the district hospital, named Baldev Das Bajoria providing it adequate medical facilities.

Formerly, there were staging bungalows for the use of travellers on the roads. They have been converted into inspection-houses. The city has 6 dak-bungalows belonging to public works department, canal, Soldiers' Board, Zila Parishad, municipal board and Remount Depot, 2 rest houses each maintained by the Remount Depot and northern railway and 6 private dharamsalas.

SARSAWA

Lat. 30°1' N.,	Long. 77°24' E.,
Pargana Sarsawa,	Tahsil Nakur,
Population. 5,574,	Area 1,277 hectares

Sarsawa which gives its name to the pargana lies on high ground, close to the edge of the cliff that marks the western limit of the uplands, and just below it flows the Budhi, a small stream. It is linked by rail and road having a railway station of the same name and being traversed by the metalled road from Delhi-Shamli-Saharanpur-Ambala and lies at a distance of 17 km. north-east from Nakur and 14 km. west from the district headquarters.

Identification of the place as Sharwa is somewhat uncertain, but it may be that Sarsawa is the old Siraspatan, celebrated as the birth place of Bachal Rani, the mother of Goga Chauhan, who is worshipped as Goga Pir all over Meerut Division. According to a legend the place derives its name from the last Hindu Raja Siraspal who had built a fort here. The mortal remains of Pir Mardana Shahid (or Kilkilli Sahib) are supposed to be lying buried on the top of the north-west bastion of the fort. In the days of Babar the fort was still an important stronghold, being built of brick. Long before the British rule, the walls had been dismantled and the mound was overgrown, with forest. The traces of four round towers of the fort are still seen.

The place is served by a post-office, dispensary, health centre and sugar mill. The weekly cattle fair which takes place here is purely of local significance and on every Tuesday markets are held where basic necessities of life can be had.

TITRON

Lat. 29°40' N. Long. 77°20' E.,

Pargana Gangoh, Tahsil Nakur

Population 5,990 Area 1,198 hectares

Titron is 14 km. from Gangoh and 40 km. south-east from Saharanpur. Through it passes a road from Gangoh to Jalalabad and Muzaffarnagar. the place on all sides lies low and the lands are watered by the Hangoli distributary of the Yamuna canal, close to which stands an old inspection bungalow. It has several brick houses which are closely packed together. The place is mainly agricultural, and the trade is of no great importance except in *khandsari*, cloth, etc. A market is held here on every Thursday. It possesses a post-office, health centre and intermediate college.

APPENDIX

INCOME AND EXPENDITURE OF LOCAL BODIES SAHARANPUR (Ref. Chapter XIV)

TABLE I (a)—Receipts (in Rs), *Municipal Board, Saharanpur*

Year	Municipal rates and taxes	Realisation under special Acts	Revenue derived from Municipal property and powers apart from taxation	Grants and contributions	Miscellaneous	Total of other heads	Total receipts
1	2	3	4	5	6	7	8
1963-64	22,61,672	2,686	3,38,397	6,12,966	1,32,095	21,13,902	54,61,718
1964-65	22,00,189	4,006	3,54,114	8,11,777	1,26,304	13,75,177	48,71,567
1965-66	23,21,110	3,644	3,32,338	9,00,224	1,12,905	16,41,188	53,11,419
1966-67	2,23,185	3,412	5,10,970	7,37,781	1,86,405	7,52,973	44,23,294
1967-68	26,55,774	4,902	8,90,634	8,07,326	92,963	8,41,257	52,93,956
1968-69	28,48,716	5,202	9,39,239	10,55,277	1,17,547	4,41,540	54,07,521
1969-70	30,60,047	8,325	9,77,090	12,56,914	1,04,068	5,99,799	60,06,253
1970-71	32,10,486	6,389	14,86,614	14,09,649	1,92,202	21,16,966	84,22,306
1971-72	31,67,093	7,645	12,90,629	14,36,645	72,517	9,31,658	69,06,177
1972-73	33,42,819	8,833	8,12,489	12,41,457	2,53,389	6,52,796	63,22,782

TABLE I (b)—Expenditure (in Rs), *Municipal Board, Saharanpur*

Year	General administration and collection charges	Public safety	Public health and convenience	Public instructions	Total of other heads	Total expenditure
1	2	3	4	5	6	7
1963-64	2,71,213	1,89,530	30,44,122	6,13,161	7,21,418	48,39,444
1964-65	3,24,813	2,05,338	24,28,138	6,27,871	5,95,524	41,81,414
1965-66	3,63,552	1,84,409	30,58,166	8,40,361	6,11,411	50,57,899
1966-67	3,63,982	3,02,692	23,75,347	8,97,802	3,77,882	4,31,770
1967-68	4,76,960	2,68,994	28,14,529	8,50,510	6,50,229	50,61,222
1968-69	4,27,740	2,97,116	25,60,528	8,36,994	7,92,365	49,14,743
1969-70	4,05,451	4,04,014	28,40,007	11,29,478	10,02,580	57,81,530
1970-71	4,75,711	3,61,137	48,29,600	12,35,322	10,62,289	79,64,259
1971-72	4,93,929	3,21,735	31,68,202	13,00,444	10,18,977	63,03,287
1972-73	5,67,698	3,26,736	34,00,447	7,13,572	5,59,024	55,67,477

TABLE II (a)—*Receipts (in Rs), Municipal Board, Hardwar*

Year	Municipal rates and taxes	Realisa- tion under special Acts	Revenue derived from municipal property and po / ers apart from taxation	Grants and contri. bu / oins	Miscella. neous	Total of other heads	Total receipts
1	2	3	4	5	6	7	8
1963-64	4,42,599	17,744	18,41,741	10,03,459	61,258	10,36,140	44,02,941
1964-65	6,37,590	18,113	24,00,371	15,68,651	36,752	10,05,953	56,68,430
1965-66	9,27,112	20,036	26,71,267	15,56,992	51,450	17,73,391	70,00,248
1966-67	10,88,992	28,008	28,00,947	14,36,346	30,569	12,87,669	66,64,531
1967-68	6,38,868	23,655	28,24,995	12,07,627	28,975	15,01,846	62,25,966
1968-69	6,07,344	21,542	32,03,141	17,05,192	64,662	5,66,914	61,73,795
1969-70	6,24,133	26,355	38,66,782	23,16,992	43,671	6,10,301	74,88,234
1970-71	6,52,154	19,145	34,39,668	14,05,626	1,14,403	12,26,672	68,57,668
1971-72	8,04,314	21,568	42,52,110	10,36,998	1,13,364	12,30,287	74,57,741
1972-73	8,79,020	23,712	46,18,814	8,86,343	58,773	9,60,996	74,27,658

TABLE II (b) — Expenditure (in Rs), Municipal Board, Hardwar

Year	General administration and collection charges	Public safety	Public health and convenience	Public Instruc- tion	Contributions	Miscellaneous	Total of other heads	Total expenditure
1	2	3	4	5	6	7	8	9
1963-64	2,79,009	7,75,497	17,47,558	6,21,443	600	8,50,029	1,26,240	44,00,376
1964-65	3,82,248	8,67,182	18,71,251	6,64,675	850	13,00,802	2,46,593	53,33,601
1965-66	5,69,077	9,75,084	18,74,982	8,57,218	840	13,27,208	2,13,754	68,18,163
1966-67	6,81,690	10,69,272	18,42,709	9,17,043	890	14,30,814	9,74,391	70,16,809
1967-68	2,93,398	12,60,558	19,21,406	9,74,439	890	11,73,614	89,937	57,14,242
1968-69	2,24,605	15,63,933	27,25,210	10,77,898	650	14,80,949	81,678	71,54,923
1969-70	2,03,701	15,00,105	23,33,140	12,18,200	830	18,96,373	42,626	71,94,995
1970-71	2,32,271	15,73,253	22,75,520	11,92,320	7,050	12,32,783	83,281	65,96,478
1971-72	2,63,065	17,86,324	31,61,830	14,30,288	1,950	7,19,105	85,762	74,48,624
1972-73	2,72,507	20,02,155	28,97,068	11,06,724	1,950	6,00,058	1,82,676	70,63,138

TABLE III (a)—Receipts (in Rs). Municipal Board, Deoband

Year	Municipal rates and taxes	Realisation under Special Acts	Revenue derives from municipal property and powers apart from taxation	Grants and contributions	Miscellaneous	Total of other heads	Total receipts
1	2	3	4	5	6	7	8
1963-64	2,08,933	8,800	22,738	89,437	26,533	6,855	3,63,296
1964-65	2,33,966	8,630	23,862	1,35,915	26,144	3,461	4,31,978
1965-66	2,42,776	10,609	30,038	1,12,041	8,236	3,875	4,07,575
1966-67	2,44,760	11,276	23,641	1,32,248	32,597	1,281	4,45,803
1967-68	2,71,064	11,710	31,693	1,90,721	10,239	3,049	5,18,476
1968-69	3,30,617	13,943	35,853	1,57,856	11,363	8,001	5,57,633
1969-70	3,74,858	17,518	35,878	1,57,046	15,852	14,298	6,15,450
1970-71	4,30,074	16,097	45,368	2,41,003	1,61,688	9,322	9,03,552
1971-72	4,56,514	16,538	68,912	2,54,677	10,641	11,125	8,18,407
1972-73	4,94,308	16,666	60,466	1,81,865	8,747	2,03,791	9,65,843

TABLE III (b) — *Expenditure (in Rs), Municipal Board, Deoband*

Year	General adminis- tration and colle- ction charges	Public safety	Public health and convei- ence	Public instruction (Institution)	Contributions	Miscella- neous	Total of other heads	Total expenditure
1	2	3	4	5	6	7	8	9
1963-64	60,588	21,749	1,85,861	73,114	4,633	8,153	20,348	3,74,446
1964-65	70,830	28,422	1,94,255	72,971	5,525	28,518	18,068	4,18,189
1965-66	77,950	14,751	1,95,993	84,960	5,944	52,297	21,167	4,53,064
1966-67	85,898	15,134	1,80,859	92,809	5,195	9,071	15,976	4,04,942
1967-68	98,194	13,127	1,89,528	93,199	7,112	11,708	21,310	4,34,178
1968-69	1,10,867	26,085	2,41,943	96,952	7,161	75,174	14,809	5,63,991
1969-70	1,05,472	49,790	3,83,597	1,18,835	12,739	56,210	20,338	7,47,271
1970-71	1,06,910	98,719	3,61,362	1,39,681	10,819	9,566	27,234	7,54,291
1971-72	1,17,480	37,562	4,03,784	1,37,329	9,539	17,077	35,140	7,57,911
1972-73	1,38,539	20,059	3,63,025	91,348	12,898	53,914	2,28,721	9,08,504

TABLE IV (a)—Receipts (in Rs), Municipal Board, Roorkee

Year	Municipal rates and taxes	Realisation under special Acts	Revenue derived from municipal property and powers apart from taxation	Grants and contributions	Miscellaneous	Total of other heads	Total receipts
1	2	3	4	5	6	7	8
1963-64	3,87,487	1,77,885	1,61,364	2,13,456	5,88,555	1,27,921	14,96,568
1964-65	3,72,158	15,860	1,86,318	2,43,816	6,46,225	8,87,566	23,51,943
1965-66	3,65,647	15,805	2,26,132	3,47,811	7,22,003	6,08,059	22,85,457
1966-67	4,08,007	17,103	2,59,733	2,55,062	7,14,648	6,52,975	23,07,528
1967-68	4,27,546	17,215	29,332	3,03,167	9,00,856	5,90,286	25,30,402
1968-69	5,08,108	17,373	2,70,791	3,50,990	8,94,388	3,59,860	24,01,510
1969-70	5,36,855	17,973	2,34,091	4,48,015	9,76,044	7,01,335	29,14,313
1970-71	6,38,200	18,830	4,79,885	4,38,967	9,50,304	6,57,708	31,83,894
1971-72	6,10,287	19,042	4,29,638	3,93,725	10,91,774	6,92,275	32,36,741
1972-73	6,61,639	17,218	4,22,890	4,60,763	3,45,638	5,01,947	24,10,095

TABLE IV (b)—Expenditure (in Rs), Municipal Board, Roorkee

Year	General administration and collection charges	Public safety	Public health	Public instruc- tion	Contri- butions	Misce- llaneous	Total of other heads	Total expenditure
1	2	3	4	5	6	7	8	9
1963-64	86,664	31,339	5,84,522	1,61,497	31,123	5,00,546	93,442	14,89,133
1964-65	90,577	30,569	11,92,240	1,29,100	38,552	5,66,036	1,12,642	21,59,716
1965-66	90,115	33,308	11,34,666	1,83,032	34,609	7,58,585	3,95,646	26,29,961
1966-67	1,09,305	39,127	9,86,051	1,75,433	33,329	7,40,269	1,41,214	22,24,728
1967-68	1,26,810	31,792	10,42,234	2,11,287	34,808	9,13,468	2,03,677	25,64,076
1968-69	1,22,129	53,363	9,91,302	1,80,774	41,456	9,65,566	1,42,004	24,96,594
1969-70	1,32,693	56,763	13,43,919	2,19,083	51,380	9,94,433	1,72,386	29,70,657
1970-71	1,46,872	69,080	12,54,438	2,55,417	46,491	10,88,549	2,17,417	30,78,264
1971-72	1,71,007	91,726	12,53,546	2,67,027	70,334	12,12,943	1,41,884	32,08,467
1972-73	1,59,088	75,848	13,46,797	1,67,588	27,209	4,74,399	2,35,279	24,86,208

TABLE V (a)—Receipts (in Rs), Municipal Board, Manglaur

Year	Municipal rates and taxes	Realisation under special Acts	Revenue derived from municipal property and apart from taxation	Grants and contributions	Miscellaneous	Total receipts
1	2	3	4	5	6	7
1963-64	70,353	2,735	13,593	46,374	2,492	1,35,549
1964-65	83,556	3,023	19,218	58,102	1,849	1,65,748
1965-66	1,13,231	3,912	13,544	1,03,328	4,378	2,38,393
1966-67	1,10,356	3,752	48,901	84,669	75	2,47,753
1967-68	1,17,471	3,512	14,907	81,883	11,391	2,29,164
1968-69	1,55,175	3,805	17,448	84,425	16,968	2,77,821
1969-70	1,65,455	5,401	16,496	1,47,234	1,931	3,36,577
1970-71	1,79,375	5,583	14,560	1,76,249	6,111	3,81,878
1971-72	2,53,668	7,237	17,442	2,22,339	7,293	5,07,979
1972-73	2,46,132	6,467	17,134	1,15,216	17,770	4,02,714

TABLE V (b)—Expenditure (in Rs), Municipal Board, Manglaur

Year	General administration and collection charges	Public safety	Public health and contribution	Public institutions	Contributions	Miscellaneous	Total expenditure
1	2	3	4	5	6	7	8
1963-64	29,700	5,887	31,415	22,480	25	65,632	1,45,139
1964-65	31,436	5,872	40,123	46,254	—	27,467	1,51,152
1965-66	35,440	9,060	44,077	45,995	25	66,004	2,00,601
1966-67	38,457	6,906	46,070	56,816	—	70,854	2,19,105
1967-68	50,155	7,554	59,183	63,800	—	78,321	2,59,013
1968-69	54,958	9,629	76,064	53,387	204	1,12,740	3,06,782
1969-70	53,740	8,239	65,583	68,597	—	70,691	2,66,850
1970-71	58,129	10,015	93,780	1,65,826	100	63,086	3,90,936
1971-72	85,145	8,839	1,12,964	1,08,989	5,100	1,43,870	4,64,907
1972-73	75,482	28,079	2,05,364	81,007	250	52,996	4,35,778

TABLE VI (a)—*Receipts (in Rs), Municipal Board, Gangoh*

Year	Municipal rates and taxes	Realisation under special Acts	Revenue derived from municipal property and powers apart from taxation	Grants and contributions	Total receipts
1	2	3	4	5	6
1963-64	90,307	1,212	34,594	44,784	1,70,897
1964-65	1,04,460	1,476	41,032	35,771	1,82,739
1965-66	1,20,985	1,049	49,863	66,409	2,38,306
1966-67	1,10,279	2,614	45,159	77,419	2,35,471
1967-68	2,13,753	1,493	53,022	73,658	3,41,926
1968-69	2,76,747	2,447	61,681	98,855	3,75,730
1969-70	2,08,252	2,024	56,448	1,33,581	4,00,305
1970-71	1,51,126	1,466	40,953	65,166	2,68,711
1971-72	1,91,036	2,102	95,878	91,042	4,80,058
1972-73	1,91,419	1,831	1,66,542	73,704	4,31,796

TABLE VI (b)—*Expenditure (in Rs), Municipal Board, Gangoh*

Year	General administration and collection charges	Public safety	Public health and conservancy	Public instruction (Education)	Construction	Total expenditure
1	2	3	4	5	6	7
1963-64	23,188	12,225	41,319	55,471	53,002	1,85,205
1964-65	33,832	13,380	53,904	21,586	62,216	1,84,918
1965-66	22,498	7,215	65,341	16,335	66,657	1,78,046
1966-67	37,740	5,469	76,562	28,900	1,07,515	2,56,186
1967-68	37,222	12,545	90,267	26,234	1,16,718	2,82,986
1968-69	31,463	4,369	83,974	27,222	1,24,212	2,71,240
1969-70	40,647	8,859	1,39,427	33,947	22,223	4,45,103
1970-71	38,022	26,254	66,994	31,686	1,55,715	3,18,671
1971-72	41,409	39,347	2,70,855	34,227	1,78,213	5,65,051
1972-73	38,268	13,658	1,56,975	25,836	2,02,029	4,36,766

TABLE VII—Receipts and Expenditure, Town Area, Ambahua

Year	Receipts (in Rs)			Expenditure (in Rs)					
	Government grants	Receipts from taxes	Other receipts	Total receipts	General administration and collection charges	Public health	Public works	Other expenditure	Total expenditure
1	2	3	4	5	6	7	8	9	10
1964-65	12,822	6,172	2,202	21,196	3,811	8,000	2,020	1,150	14,981
1965-66	7,981	8,230	4,456	20,677	2,547	9,558	5,092	2,589	19,786
1966-67	20,955	8,160	3,430	32,554	3,616	11,592	6,035	2,786	24,029
1967-68	23,707	11,494	5,325	40,526	3,889	20,224	12,042	6,571	32,776
1968-69	19,472	5,413	5,538	35,423	3,564	10,001	26,973	6,256	46,795
1969-70	25,447	10,572	5,940	41,959	5,704	15,375	17,046	6,555	44,680
1970-71	22,460	11,010	12,526	45,996	5,200	12,938	23,473	6,189	47,800
1971-72	15,524	9,009	10,375	34,908	5,009	14,553	6,109	4,189	30,839
1972-73	10,000	17,253	21,312	48,565	9,618	24,300	5,200	14,298	53,416

TABLE VIII — Receipts and Expenditure, Town Area, Belcet

Year	Receipts (in Rs)			Expenditure (in Rs)					
	Grants	Receipts from taxes	Other receipts	Total receipt	General adminis- tration and collection charges	Public health	Public works	Other expenditure	Total expenditure
1	2	3	4	5	6	7	8	9	10
1964-65	14,331	22,737	7,006	44,074	12,103	10,201	9,097	3,399	34,799
1965-66	12,322	20,356	8,175	40,853	13,750	11,352	15,055	2,882	23,039
1966-67	22,998	23,689	7,834	54,521	15,372	13,200	19,532	6,239	54,343
1967-68	31,964	30,050	11,449	73,463	18,020	16,026	31,467	4,820	70,333
1968-69	28,707	35,319	10,972	74,998	17,425	15,248	36,480	5,715	74,868
1969-70	35,278	30,439	11,402	77,119	17,417	13,569	26,620	9,916	67,522
1970-71	24,998	35,941	11,959	72,898	18,250	17,650	33,146	9,516	78,562
1971-72	18,484	60,444	12,897	91,825	20,452	20,393	24,138	13,524	78,507
1972-73	29,502	1,20,635	13,251	1,63,388	26,112	29,626	50,432	21,793	1,27,963

TABLE IX—Receipts and Expenditure, Town Area, Chilkana-Sultanpur

Year	Receipts (in Rs)			Expenditure (in Rs)					
	Government grants	Receipts from taxes	Other receipts	Total receipts	General administration and collection charges	Public health	Public work	Other expenditure	Total expenditure
1	2	3	4	5	6	7	8	9	10
1964-65	9,408	5,081	9,037	23,526	824	10,503	3,068	1,306	15,701
1965-66	6,685	2,865	8,268	17,818	749	10,703	6,032	960	18,444
1966-67	19,878	1,925	9,602	31,405	874	10,557	12,569	1,109	25,109
1967-68	22,076	2,981	9,011	34,068	799	16,776	21,540	1,556	40,671
1968-69	20,011	5,380	11,661	37,052	649	12,642	23,200	381	36,872
1969-70	23,344	4,762	14,988	43,094	1,199	14,114	19,489	876	35,678
1970-71	22,481	13,779	13,733	49,993	849	16,774	23,504	461	41,588
1971-72	15,313	7,232	9,870	32,415	885	20,106	19,221	2,140	42,352
1972-73	21,900	8,610	17,037	47,547	1,513	28,819	28,985	3,591	62,908

TABLE X—Receipts and Expenditure, Town Area, Jabarhera (Jhabareda)

Year	Receipts (in Rs)				Expenditure (in Rs)					
	Government grants	Receipts from taxes	Other receipts	Total receipts	General administration and collection charges	Public health	Public work	Other expenditure	Total expenditure	
1	2	3	4	5	6	7	8	9	10	
1964-65	6,551	6,857	32	13,440	565	5,008	149	458	6,180	
1965-66	7,105	6,301	—	13,406	720	6,302	5,843	935	13,800	
1966-67	19,000	7,587	—	26,587	790	5,853	6,979	150	14,722	
1967-68	22,280	8,860	—	31,140	960	9,194	16,505	1,022	27,681	
1968-69	19,160	4,672	5,826	29,658	960	8,678	22,000	600	23,238	
1969-70	23,600	7,197	—	30,797	960	7,108	13,731	1,325	23,124	
1970-71	20,100	3,470	6,571	30,141	1,372	10,301	25,618	1,997	39,288	
1971-72	14,876	3,788	7,045	25,709	1,260	11,692	19,957	724	33,633	
1972-73	13,848	3,689	6,247	23,784	1,381	14,991	12,729	1,399	30,500	

TABLE XI—Receipts and Expenditure, Town Area, Nanauta

Year	Receipts (in Rs)			Total receipts	Expenditure (in Rs)					Total expenditure
	Grants from roads	Receipts from taxes	Other receipts		General administration and collection charges	Public health	Public work	Others		
1	2	3	4	5	6	7	8	9	10	
1963-64	7,385	7,000	26,387	40,772	2,208	10,225	7,073	21,266	40,772	
1964-65	15,000	10,000	26,577	51,577	2,412	8,928	16,576	23,661	51,577	
1965-66	15,000	8,144	11,756	34,900	4,767	9,122	8,000	13,011	34,900	
1966-67	5,000	4,679	21,273	30,952	4,767	9,785	6,000	10,400	30,952	
1967-68	23,000	3,749	11,324	38,073	3,255	3,924	20,791	10,103	38,073	
1968-69	5,000	6,172	9,224	20,396	4,435	4,239	6,000	5,722	20,396	
1969-70	21,000	6,797	9,658	37,455	3,205	5,840	16,455	11,955	37,455	
1970-71	17,500	8,325	9,725	35,550	2,535	4,445	18,925	9,645	35,550	
1971-72	21,000	9,633	9,855	40,488	2,496	4,596	22,348	11,048	40,488	
1972-73	20,000	9,534	9,953	39,487	2,588	4,493	21,681	10,725	39,487	

TABLE XII—Receipts and Expenditure, Town Area, Rampur Maniharan

Year	Receipts (in Rs)			Total receipts	Expenditure (in Rs)					Total expenditure
	Govern- ment grants	Receipts from taxes	Other receipts		General adminis- tration and collection charges	Public health	Public work	Other expendi- ture		
1	2	3	4	5	6	7	8	9	10	
1964-65	22,225	28,967	10,086	61,278	1,000	23,477	36,470	3,031	63,978	
1965-66	30,408	12,110	15,718	58,236	2,186	23,398	17,883	7,506	50,973	
1966-67	33,295	3,741	42,191	79,227	20,422	19,846	33,607	12,524	86,399	
1967-68	51,605	6,016	21,353	78,974	24,587	27,635	14,234	10,173	76,629	
1968-69	38,341	68,229	15,874	1,22,444	26,445	28,981	60,869	14,212	1,30,507	
1969-70	32,806	50,897	18,656	1,02,359	29,156	32,580	29,250	14,627	1,05,613	
1970-71	30,887	1,04,121	24,736	1,59,744	24,693	31,648	47,650	15,937	1,19,928	
1971-72	34,002	92,971	25,329	1,52,302	30,573	47,812	38,906	30,575	1,47,865	
1972-73	85,552	1,14,767	41,291	2,41,610	39,553	53,632	49,313	96,548	2,39,446	

TABLE XIII—Receipts and Expenditure, Notified Area, Titron

Year	Receipts (in Rs)			Expenditure (in Rs)					
	Government grants	Receipts from taxes	Other receipts	Total receipts	General administration and collection charges	Public health works	Public works	Other expenditure	Total expenditure
1	2	3	4	5	6	7	8	9	0
1965-66	8,520	10,287	3,905	22,712	9,664	341	16,749	2,899	29,653
1966-67	20,765	10,299	5,949	37,013	14,411	—	18,904	3,052	36,367
1967-68	29,538	11,433	12,004	52,975	17,390	—	19,534	2,649	39,573
1968-69	—	—	—	—	—	—	—	—	—
1969-70	—	—	—	—	—	—	—	—	—
1970-71	24,588	21,816	5,241	51,645	9,191	11,860	11,510	15,452	48,013
1971-72	26,446	21,651	5,099	53,196	8,723	13,990	11,224	13,693	47,630
1972-73	23,639	31,614	30,558	85,811	9,003	20,030	13,563	46,696	89,292

TABLE XIV—*Receipts and Expenditure, Town Area, Sarsawa*

Year	Receipts (in Rs)			Expenditure (in Rs)					
	Govern- ment grants	Receipts from taxes	Other receipts	Total receipts	General adminis- tration and collection charges	Public health	Public work	Other expendi- ture	Total expendi- ture
1	2	3	4	5	6	7	8	9	10
1964-65	12,761	10,492	21,096	44,349	13,908	10,084	14,954	6,004	950
1965-66	6,974	21,289	3,509	31,772	11,550	9,633	8,352	4,973	34,508
1966-67	15,000	2,470	25,108	42,579	5,212	9,872	11,064	9,210	35,358
1967-68	15,000	22,275	11,271	48,587	11,175	10,512	16,784	7,552	36,023
1968-69	20,089	20,919	5,527	46,533	12,117	11,619	26,102	8,806	58,644
1969-70	27,515	27,485	13,225	68,225	11,480	16,579	9,663	13,171	50,893
1970-71	25,641	31,310	16,109	72,060	13,212	18,689	27,053	13,062	72,016
1971-72	18,251	66,459	15,084	99,794	14,573	20,976	12,739	15,703	63,991
1972-73	29,011	1,92,429	16,483	2,37,923	33,783	21,641	35,748	4,086	1,32,036

TABLE XV (a) — *Receipts (in Rs), Zila Parishad, Saharanpur*

Year	Government grants	Education (including industrial and technical)	Medical and public health	Cattle pound	Fair and exhibition	Total of all other heads	Total receipts
1	2	3	4	5	6	7	8
1963-64	24,68,844	1,07,246	586	20,033	45,458	2,71,721	29,16,882
1964-65	27,30,831	1,24,895	524	20,796	56,674	2,76,968	32,10,688
1965-66	34,41,229	1,29,374	524	16,782	39,279	3,02,237	39,32,425
1966-67	38,14,682	1,51,311	474	11,596	61,919	4,60,612	45,03,624
1967-68	41,75,891	1,56,041	260	14,317	80,378	4,27,132	48,54,019
1968-69	44,81,720	1,33,859	258	21,800	92,418	5,59,859	52,91,914
1969-70	54,79,493	1,45,394	164	23,035	1,15,816	2,97,951	60,61,853
1970-71	57,06,487	1,46,389	756	14,748	1,12,827	7,57,084	67,38,291
1971-72	93,33,075	1,54,828	4,195	11,434	1,25,626	15,98,322	1,12,29,480
1972-73	32,35,929	77,099	8,149	12,295	1,33,486	13,21,515	47,88,473

TABLE XV (b) — *Expenditure (in Rs), Zila Parishad, Saharanpur*

Year	General administration	Education including industrial	Medical and public health	Public works	Fair and exhibition	Total of all other heads	Total expenditure
1	2	3	4	5	6	7	8
1963-64	1,33,965	21,53,173	1,48,945	2,37,091	34,188	1,89,596	28,92,95
1964-65	1,35,899	35,49,699	1,48,055	1,91,300	35,877	1,98,585	32,59,415
1965-66	1,61,142	33,08,788	1,51,600	3,23,470	41,779	1,43,728	41,30,507
1966-67	1,80,654	35,74,833	1,53,288	3,52,282	36,224	1,40,069	44,37,350
1967-68	1,65,180	35,59,750	1,68,650	3,14,231	57,353	1,62,552	44,27,716
1968-69	1,72,227	36,86,949	1,64,822	4,21,655	59,150	1,26,981	46,41,784
1969-70	1,84,385	48,67,377	1,65,237	4,83,422	71,269	1,37,939	59,09,629
1970-71	1,56,527	49,69,715	1,84,260	6,75,484	85,018	2,98,632	63,69,636
1971-72	1,83,686	60,42,368	2,49,561	10,01,159	82,757	2,22,687	77,82,418
1972-73	2,06,480	36,41,243	2,64,307	13,64,785	85,007	33,25,028	88,86,850

CONVERSION FACTORS

Money

- 1 pie=0.52 paise
- 1 pice=1.56 paise

Linear Measure

- 1 inch=2.54 centimetres
- 1 foot=30.48 centimetres
- 1 yard=91.44 centimetres
- 1 mile=1.61 kilometres

Square Measure

- 1 Square foot=0.093 square metre
- 1 square yard=0.836 square metre
- 1 square mile=2.56 square kilometres=259 hectares
- 1 acre=0.405 hectares

Cubic Measure

- 1 cubic foot=0.028 cubic metre

Measure of Capacity

- 1 gallon (imperial)=4.55 litres
- 1 seer* (80 tolas)= 0.937 litre

Measure of Weight

- 1 tola=11.66 grams
- 1 chatak=58.32 grams
- 1 seer*=933.10 grams
- 1 maund*=37.32 kilograms
- 1 ounce (Avoirdupois)=28.35 grams
- 1 pound (Avoirdupois)=453.59 grams
- 1 hundredweight=50.80 kilograms
- 1 ton=101.05 kilograms=1 016 metric tonnes

Tharmometer Scales

- 1° Fahrenheit=9/5° centigrade+32

*As defined in Indian Standards Weight Act, 1939

GLOSSARY

<i>Adalat</i>	... Court of justice
<i>Amin</i>	... Petty official attached to court of justice for realising government dues
<i>Asami</i>	... A lessee of a disabled Bhumidhar or of a Sirdar or a tenant of the <i>goan sabha</i> having no transferable right
<i>Ashram</i>	... An hermitage
<i>Arhar</i>	... Pigeon pea
<i>Arti</i>	... Ceremony performed at the time of worship by moving lighted lamps of camphor around the idol
<i>Bahikhata</i>	... Accounts register
<i>Bajra</i>	... Pearl millet
<i>Ban</i>	... Twine made of <i>moonj</i>
<i>Bhajan mandali</i>	... Choir
<i>Bhalyachara</i>	... Brotherhood
<i>Bhang</i>	... A hemp plant (<i>Cannabis sativa</i>), the leaves and young buds are bruised when they are ripe and are smoked for intoxicants
<i>Bhoodan</i>	... Free donation of land
<i>Bhumidhar</i>	... A peasant proprietor having permanent heritable and transferable rights on his holdings
<i>Bidi</i>	... Indigenous cigarette
<i>Chakra</i>	... Wheel
<i>Chandu</i>	... Preparation of opium smoked as an intoxicants
<i>Charas</i>	... Hemp drug
<i>Chowdhry</i>	... A headman
<i>Dai</i>	... Midwife without diploma
<i>Dal</i>	... A pulse
<i>Dargah</i>	... A shrine of Muslim saint
<i>Dest</i>	... Indigenous
<i>Dhatura</i>	... Belladonna
<i>Dirham</i>	... An old coin
<i>Ganja</i>	... A hemp plant (<i>Cannabis sativa</i>) the leaves and young buds of which are bruised when they are ripe and are smoked for intoxicants
<i>Gaon</i>	... Village
<i>Ghar</i>	... House
<i>Gotra</i>	... Clan
<i>Guls</i>	... Drains
<i>Gur</i>	... Jaggery
<i>Gurmandi</i>	... Jaggery market

<i>Gurkulas</i>	... A school where fees are not charged (residence of gurus where education was imparted)
<i>Hartal</i>	... Strike
<i>Hats</i>	... A periodical market
<i>Hundis</i>	... A kind of bill of exchange
<i>Jali</i>	... Mesh
<i>Kamdars</i>	... Labourers
<i>Kavisammelan</i>	... Symposium of poets (Hindi)
<i>Khandsari</i>	... Indigenous sugar
<i>Khaddar</i>	... A coarse hand woven cloth
<i>Khudkasht</i>	... Cultivation by the land owner either by himself or through hired labour
<i>Kirana</i>	... General merchandise
<i>Kison sabha</i>	... Farmer's assembly
<i>Kist</i>	... Instalment
<i>Kirtan</i>	... Recitation of names and attributes of deities
<i>Kalhus</i>	... Expeller
<i>Kullarh</i>	... Small earthen pot
<i>Lagan</i>	... Scheduled time
<i>Langar</i>	... Free kitchen
<i>Lathi</i>	... Stick
<i>Madak</i>	... An intoxicant
<i>Madarsa</i>	... School
<i>Mahajan</i>	... A money-lender
<i>Mahal</i>	... Unit of land under separate engagement payment of revenue
<i>Maktab</i>	... A school for school children
<i>Mali(s)</i>	... Gardener
<i>Mandi</i>	... Wholesale grain market
<i>Mandua</i>	... A kind of small millet
<i>Masoor</i>	... A kind of pulse
<i>Mattha</i>	... Butter milk
<i>Moong</i>	... Green grain
<i>Moonj</i>	... A kind of grass used for making ropes, mats, baskets, etc.
<i>Moth</i>	... A kind of pulse
<i>Muhalla</i>	... Residential locality
<i>Mundan</i>	... First head shaving ceremony
<i>Munsif</i>	... A puisve judge
<i>Mushaira</i>	... Symposium of poets (Urdu)
<i>Naib</i>	... Assistant
<i>Narkul</i>	... Reed
<i>Nautanki</i>	... Open air theatre
<i>Nyaya</i>	... Justice

<i>Nazim</i>	... Head of a district with revenue, executive and judicial powers under the Avadh nawabs
<i>Panch</i>	... A member of village panchayat
<i>Pathshalas</i>	... School
<i>Peepee</i>	... Whistle
<i>Qanungo</i>	... A petty revenue official
<i>Qawwali</i>	... Persian or Urdu verses rendered to a traditionally set time
<i>Qtzi</i>	... Judge, who also solemnises Muslim marriages
<i>Rath</i>	... Chariot
<i>Reh</i>	... Saline efflorescence
<i>Sapinda</i>	... Literally having the same pinda or funeral cake, and aguate within generations
<i>Satyagraha</i>	... Non-violence
<i>Sawan</i>	... A coarse grain
<i>Sikk</i>	... A small administrative unit
<i>Str</i>	... Land cultivated by owner
<i>Sirdar</i>	... A holder of the land having only cultivation rights but no right to transfer the holding
<i>Sirkar</i>	... Subdivision of subah, a district in pre-British days
<i>Subah</i>	... Province
<i>Surkhi</i>	... Burnt lime powder
<i>Taluqa</i>	... Tract of proprietary land
<i>Taqavi</i>	... Loan, with or without interest, given by the government
<i>Tari</i>	... Fermented or unfermented juice or palmyra palm or date palm
<i>Urd</i>	... Black grain
<i>Urs</i>	... Commemoration of death anniversary of Muslim saint at his tomb
<i>Vaid</i>	... Practitioner of Ayurvedic system of medicine

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